

The effect of service-use on resilience in at-risk youth: A South African study

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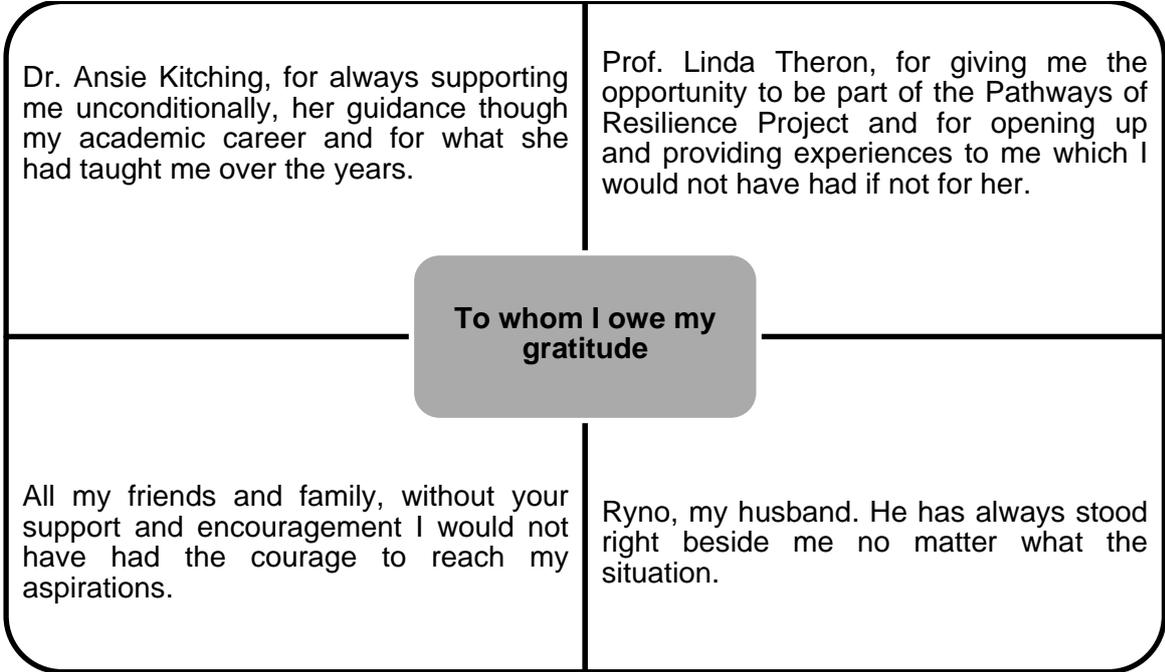
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**Dissertation submitted in fulfilment of the requirements for the degree
Master of Education in Educational Psychology at the
Potchefstroom Campus of the North-West University**

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November 2011

ACKNOWLEDGEMENTS



ABSTRACT

Literature shows that serious concerns are being raised about the wellbeing of young people in South Africa, however somehow youth manage to sustain their health and wellbeing despite the risks they face. This phenomenon is called resilience; youth are coping well in the face of adversity, nevertheless little is known about the relationship between resilience and service usage. Resources such as empathy, religious leaders and personal faith, supportive family relationships and bonding with a parent empower youth against risks they might face, which might counteract various risks which impair youth from becoming resilient. This study focuses on the correlation between services and resilience through a quantitative cross-sectional survey of the Pathways to Resilience Youth Measure (PRYM). 1209 participants between the ages of 12 and 19, from QwaQwa and Bethlehem in the Free State, South Africa were involved. Statistical analysis found that been questioned by the Police, not as a witness (-0.203), foster home (-0.200), gone to court, not as a witness (-0.190), been put into jail (-0.227), been on probation (-0.222) and substance abuse or addiction services (-0.222) scored statistically practically significantly. These results might indicate that participants in this study do not necessarily use services which are identified in the PRYM; moreover low resilience youth use services due to their involvement in activities which might get them into trouble or have them witness such activities. Findings might also indicate that those at-risk youth whose family cannot care for them sufficiently might have low resilience levels and have to make use of services such as placements in Foster homes. Finally the limited use of services by high resilience youth might correspond with reports that youth make positive meaning of live events and circumstances.

Keywords: Resilience, Pathways to Resilience Youth Measure (PRYM), services, protective factors, risk factors, at-risk, youth, South Africa

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CHAPTER 1

INTRODUCTION AND ORIENTATION

1.1 Introduction

Many young people live their lives between two extremes on the pathway to adulthood. At the one extreme they navigate through adolescence without serious psychological, social or health problems that threaten their wellbeing. At the other extreme they experience a number of mental health problems or threats to physical health (Compass, 2004:263). According to Keyes (2006:400) these young people are more likely to exhibit conduct disorders, experience academic problems and disengage from society. In view of the mental health threats that young people currently face in the South African context, serious concerns are raised regarding the wellbeing of young people (Reddy *et al.*, 2010:10). However, research indicates that there are young people who manage to maintain their health and wellbeing despite the threats that they encounter.

The phenomenon of somehow coping well with adversities and threats to wellbeing which some children and adolescents display has been described in literature as resilience (Anthony, 1974; Garmezy, 1971; Masten, 2001:227; Murphy, 1974; Murphy & Moriarity, 1976; Rutter, 1987; Werner & Smith, 1982).

1.2 Problem statement

In a recent study, Ungar *et al.*, (2007:288) hypothesizes that resilience is not only the individual person's potential to overcome adverse situations, as initially argued. Resilience also encompasses the community's input to provide health-promoting resources such as community-based, correctional, educational, child, youth and family and mental health services in culturally relevant ways. Ungar *et al.*, (2008:10) report that personal context, such as community and social institutions, as well as culture provide these resources. Thus when communities, context and cultures provide adequate enabling resources, young people are supported towards resilience.

Furthermore, Ungar (2011:1) argues that more emphasis should be placed on the role social and physical ecologies play in the development of positive outcomes, when individuals encounter risk factors. He mentions four principles which form the basis of the ecological interpretation of resilience as a construct; these are decentrality, complexity, atypicality and

cultural relativity. He suggests that these four principles can guide us in future theory development, research and design of intervention plans to promote well-being among individuals who are facing risks.

Research by Keyes (2006:396) on the state of mental health in American adolescents confirms that the availability of resources may decrease the effect of the risk factors and enhance the individual's mental health. In a study on the influence of social resources; such as parent, teacher and school support on the outcomes (academic, emotional and social competence) of children and adolescents, Nettles *et al.*, (2000:47) confirmed the importance of social resources and highlighted the need for effective programmes and intervention for the development of resilient youth. It was evident in their research that the ability to cope amidst adversity is largely informed by the resources and support available to at-risk youth.

However, research on resilience has mainly been undertaken in western contexts (Boyden & Mann, 2005:10), resulting in limited evidence on how differences in culture might influence the development of a resilient being (Masten & O'Dougherty Wright, 2010:219). Ungar (2005:439) argues that there is not sufficient understanding of people's own culturally determined indicators of resilience and in particular emphasises the limited knowledge about the way in which service ecologies relate to adolescents' ability to do well in adverse situations. Ungar (2011:9) states in a later article that the process of positive growth is culturally embedded, it has a productive force for psychosocial health and what culture brings to resilience must still be accounted for. In response to his concerns he developed the Pathways to Resilience Research Project (ICURA), to understand resilience as a culturally and contextually embedded construct from a social-ecological perspective, with the aim of contributing to an understanding of how young people negotiate their wellbeing amidst adversities and furthermore to investigate what contributing factors service usage brings to individuals who are doing well. Not only is this study part of the Pathways to Resilience Research Project, but it also addresses the gap in South African literature with regard to the relationship between resilience and service-use (Ungar, 2011:9).

The project is currently running in five countries, including South Africa. The collaborative project is coordinated in South Africa by Professor Linda Theron from North-West University, in partnership with Professor Michael Ungar from Dalhousie University in Halifax, Canada. The study described in this report forms part of the larger South African Pathways to Resilience Project (Resilience Research Centre, 2010:1-2).

1.3 The purpose and the aims of the study

The purpose of this study was to explore whether service usage contributes to resilience, as doing well amidst adversity, in at-risk youth in the South African context.

The main aim of this study was to investigate the effect that service-use has on the resilience in a South African sample of at-risk youth. To achieve this main aim the subsequent aims were:

- To conduct a literature study on resilience as a multi-dimensional construct
- To review risk and protective factors which contribute to the resilience of South African adolescents who are at-risk by various adversities.
- To determine whether the services rendered in the community contribute to the resilience of at-risk youth

Considering the purpose and aims, the main research question addressed in this study was:

- What is the effect of service-use on the resilience of a group of at-risk South African youth?

To answer this question the following sub-questions were also addressed:

- How is resilience as a multi-cultural construct understood in the literature?
- What are the risk and protective factors that contribute to the resilience of South African adolescents who are at-risk?
- What services, if any, contribute to the resilience of at-risk youth?

1.4 Conceptual framework

Waller (2001:290) suggests that resilience is a multi-determined and ever-changing product of interacting forces within a given ecosystemic context. This study was informed by the Ecological Systems Theory. The theory argues that the individual is embedded in various systems which imply that the individual needs these systems to overcome adverse situations. The theory is in line with Ungar's hypothesis that resilience is a multi-dimensional construct which encompasses the entire systemic context in which the individual is engaged.

The importance of various systems for the individual's development is emphasised in the *Ecological Systems Theory*, now known as the *Ecosystemic Theory* (Paquette & Ryan, 2001). The theory developed by Bronfenbrenner focuses on the relationships of systems in

an individual's environment and is described as a socio-cultural view of development. Five environmental systems, also known as layers, ranging from very specific inputs of interactions in the social context to a very broad input from culture, constitute the environment that influences us (Donald *et al.*, 2010:40; Bronfenbrenner, 1979; Paquette & Ryan, 2001).

Firstly, the *Micro-systems* are settings in which an individual develops and functions, also known as person factors. These systems include family, peer group, school or community. It is important to note that there are direct interactions between the individual and these settings and that the systems are actively constructed in the process of interaction. The relationships within these systems have a cyclical impact on each other, for example a child's parents affect his/her beliefs or behaviours, whilst the child also affects the behaviour or beliefs of the parents (Donald *et al.*, 2010:40; Bronfenbrenner, 1979; Paquette & Ryan, 2001).

Secondly, the *Meso-system* is where the different micro-systems, such as the family, peer groups, classrooms and church, interact. For example a learner who has difficulties with parental rejection might have difficulty with school, while peer influences may also cause difficulty at home (Donald *et al.*, 2010:40; Bronfenbrenner, 1979; Paquette & Ryan, 2001).

Thirdly, the *Exo-system* is seen as the social settings that influence the immediate context of the person. The exo-system does not have a direct role in a particular micro-system, but influences the immediate context of the person in an indirect way. In this layer the interaction is with some structures in the micro-system; for example a parent's workplace schedule or community-based family resources that influence the relationship between parent and child. Services (such as legal and social welfare services), are situated in this layer, for example government agencies that fund parks or libraries create a micro-system environment for the individual in which to interact (Donald *et al.*, 2010:40; Bronfenbrenner, 1979; Paquette & Ryan, 2001).

Fourthly, the attitudes as well as ideologies of the individual's culture manifest themselves in the *Macro-system*. This layer includes cultural values, customs and laws. An example is the belief that it is a parents' duty to care for their children, which results in that particular culture not providing extra resources for a higher quality of parenting (Paquette & Ryan, 2001; Bronfenbrenner, 1979).

Finally, the *Chrono-system* is the layer that encompasses the dimension of time, with regard to the individual's environment. This element might be external events such as the timing of death of a parent or internal events such as physiological changes that take place over time. Thus this layer is defined as changes in a person's environment overtime (Paquette & Ryan, 2001; Bronfenbrenner, 1979).

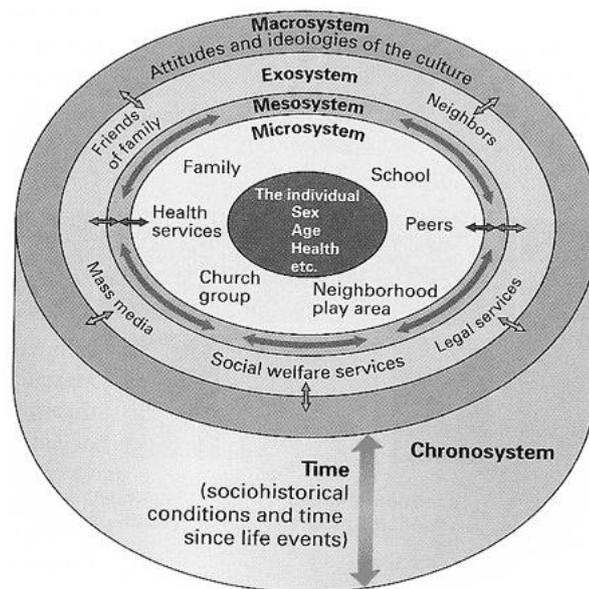


Figure 1: Bronfenbrenner's Ecological Systems Theory (Cadwallader, 2010)

Bronfenbrenner's model in Figure 1, describes the interaction between the different layers as well as the ripple effect when equilibrium is not maintained. The theory argues that interaction among family, services, schools, community, culture and religion all have an influence on the development of individuals in the ecosystem (Donald *et al.*, 2010:40).

Based on Ecosystemic Theory, it is assumed that young people who are at-risk are part of micro-systems that have a direct influence on their resilience. They are also embedded within particular exo-systems that influence them in an indirect way. Services rendered to at-risk youth form part of this exo-system and might contribute to the development of resilience in these young people.

1.5 Research design and methodology

1.5.1 Literature study

The following databases were used for the preparation as well as the formulation of this literature study:

- EBSCOHost: Academic Search Complete, Eric, Medline, PsycINFO,
- JSTOR
- SAePublications
- PsySSA website

- HSRC website

Keywords: Mental health; Resilience; African culture; Pathways to Resilience; Adolescents; Services.

1.5.2 Empirical study

1.5.2.1. Research context

The empirical research for this study was conducted in Bethlehem and QwaQwa, a part of the Thabo Mofutsanyana District Municipality, located in the: Dihlabeng- and Maluti-a-Phofung Local Municipalities respectively and is situated in the Free State Province, South Africa. Due to the closure of many industries in the immediate area of QwaQwa, the surrounding community experienced a drastic economical decline since 1996 causing the unemployment rate increased to 57%. The Demarcation Board estimated that 69% of people living in the local municipality earned less than R1000.00 per month, where 53% of the 69% earned less than R500.00 per month. QwaQwa is thus the poorest local municipality in the district. Basic services, such as clean water, are a problem. In the Harrismith (a nearby town) and QwaQwa regions, 16 425 people do not have access to clean water (Department of Cooperative Governance and Traditional Affairs, 2010).

The following are key challenges this local municipality is experiencing (these may also be seen as risk factors): poverty, inadequate provision and maintenance of basic infrastructure, informal housing and insecurity of tenure, inadequate public transport, lack of economic opportunities, high illiteracy and innumeracy, non-payment of services, droughts, HIV/AIDS, unemployment, crime (Department of Cooperative Governance and Traditional Affairs, 2010). Given the high rates of poverty, unemployment, HIV/AIDS and crime it can be assumed that youth living in these areas are at-risk for non-functional or negative outcomes

1.5.2.2 Research design and methodology

Literature suggests two main ways in which to conduct research namely qualitative and quantitative research methods (Gilbert, 2008:35). In this research project a quantitative research design embedded in the positivist paradigm (Creswell, 2009:6; Maree, 2007:51; Neuman, 2011:95) was applied. Since it was the intention to focus on statistical analysis, a cross-sectional survey was used to gather data in QwaQwa and Bethlehem in the Free State Province, through purposive sampling. A cross-sectional survey entails that people from different groups are sampled and compared by category, for example age or gender. The

aim was to gain information about a large population by surveying a smaller sample of the population (Gravetter & Forzano, 2009:288; Leedy & Ormrod, 2010:186; Remler & Van Ryzin, 2011:449; Shaughnessy *et al.*, 2009:152).

1.5.2.3 Population and sample

It is important to note that this study made use of secondary data analysis; data collected by others (Remler & Van Ryzin, 2011:8). The description of the population and sample therefore refers to the larger study. The population included young people between the ages of 12 and 19 years old who live in QwaQwa and Bethlehem in the Free State Province and who were considered to be at-risk youth. Purposive sampling (sampling done with a particular purpose and based on certain requirements indicated as categories) was applied (Maree, 2007:178; Leedy & Ormrod, 2010:212; Remler & Van Ryzin, 2011:58). The categories for the selection of participants were developed in consultation with an Advisory Committee (see par 3). A total of 1209 participants contributed to the project, as decided by the ICURA research partners (Resilience Research Centre, 2010:4-4). The participants included 200 participants referred by service providers and non-governmental organisations (NGOs), 224 learners recruited by community members such as Life Orientation, Life Skills educators and those involved in a School-based support teams in the QwaQwa and Bethlehem area, and 785 participants recruited in local schools.

1.5.2.4 Data collection

The data for the larger study were collected between February and October 2010. Three Sesotho-speaking field workers administered the Pathways to Resilience Youth Measure (PRYM, see Addendum A) (Ungar & Liebenberg, 2011:127; Resilience Research Centre, 2010:4-11), as described in par 3.2.5. Before commencing with the data collection, the fieldworkers were trained by Doctor Linda Liebenberg, Doctor Macalani Malindi, Professor Linda Theron and Professor Michael Ungar in the administration of the PRYM. Dr Malindi supervised the administration throughout the data collection process.

The PRYM was adapted for use in a South African population. Specific words or phrases in the questionnaire that might not make sense in English were translated into Sesotho to make the questions clearer in order to ensure that people from different language groups are included in conversations. The term “Code Switches” is used within the South African context to describe such phrases (ICURA Advisory Committee, 2010b; Ungar & Liebenberg, 2011:127; Resilience Research Centre, 2010:4).

Examples of code switches (ICURA Advisory Committee, 2010b):

- Affection (Sesotho-Lerato and Isi-Zulu-uthando were suggested)
- Bunk (“dotjha” derived from the English word, dodge)
- Nationality (botjhaba-Sesotho)
- Adoptive mother (mme eo o mo filweng ka molao)

All the code switches used in this study are discussed in chapter 3.

For the purpose of this secondary study the whole population of the Pathways to Resilience Research Project was used, but only Section B and Section C of the PRYM questionnaire were used for data analysis.

1.5.2.5 Measuring instruments

The Pathways to Resilience Youth Measure (PRYM) (see Addendum A) was used for data collection. This questionnaire measures the risk exposure, resilience as well as service-use of every participant. It should be noted that the measure (PRYM) has not been standardised for South African youth (ICURA Advisory Committee, 2010a; Ungar & Liebenberg, 2011:127; Resilience Research Centre: 2010:3-1).

The PRYM comprises various sub-scales (The original Cronbach Alphas are given in parenthesis. The Cronbach Alphas for this specific study will be calculated when the data are analysed). They are:

- The Child and Youth Resilience Measure, a 28-item measure. This measure was developed with a purposeful sample of growing youth facing diverse types of adversity, with a reliability score of 0.8 for the original 20 CYRM identified in an exploratory factor analysis (Ungar & Liebenberg, 2011:127).
- Strengths and Difficulties Questionnaire ($\alpha=0.8$), is a brief Mental Health Screening Questionnaire in which the following sub-scales will be used (Resilience Research Centre, 2010:2):
 - Pro-Social Subscale ($\alpha=0.66$) (Resilience Research Centre, 2010:2).
 - Conduct Problems ($\alpha=0.60$) (Resilience Research Centre, 2010:2).
 - Peer Problems ($\alpha=0.41$) (Resilience Research Centre, 2010:2).
- Youth Services Survey (YSS), which assesses the Service-use in youth over a specific timeframe (Resilience Research Centre, 2010:3).

- A 12-item version of the Centre for Epidemiological Studies Depression Scale ($\alpha=0.85$) (Resilience Research Centre, 2010:3).
- Subscales from the 4HSQ, 4-H study of Positive Youth Development, which establish the levels of delinquency ($\alpha=0.73$) and risk behaviour, and more specifically substance abuse ($\alpha=0.86$) (Resilience Research Centre, 2010:4)

Chapter 3 consists of a more in-depth discussion on the various subscales included in the PRYM. The collected data were captured into the Statistical Package for the Social Sciences (SPSS 19.0) programme and used for data analysis (SPSS, 2010).

1.5.2.6 Data analysis

A resilience score for each participant was calculated from the PRYM (Resilience Research Centre, 2010:4-6). For the purpose of this study the Youth Services Survey (Section C) of the PRYM was used; it questioned youth about the services in which they had participated in the last 12 months. Descriptive statistics were used to identify the correlation between service-use as well as resilience within different groups (see par 4.2.3.).

The data were divided into two groups, the first being those who fell in the first quartile, and the second those who fell in the third quartile with regard to their resilience scores.

Inferential statistics such as correlation coefficients and t-tests were used to establish whether there was a significant difference between service utilisation within and between the two groups. With the calculation of the effect size as indicated, the practical significance of the analysed data was determined (Creswell, 2009:12-157; Ellis & Steyn, 2003:51; Maree, 2007:210-211).

1.5.2.7 Reliability and validity

The reliability of the measuring instruments within the PRYM was established with Cronbach Alphas. The Cronbach Alpha score determines the internal consistency of factors within the measuring instruments of the PRYM, and also indicates the contribution of these items (Cronbach, 1951; Gravetter & Forzano, 2009:461; Maree, 2007:216). The CRYM (embedded in the PRYM, see par 1.5.2.5 and par 3.1.1) was tested in various countries such as

Canada, USA, Colombia, China, India, Russia, Palestine, Israel, Tanzania, Gambia and South Africa. For specific reliability scores refer to par 4.2.5. (Ungar & Liebenberg, 2011:127; Resilience Research Centre, 2010:3).

With the use of content validity it was possible to measure whether the PRYM is representative of the content area (Maree, 2007:217; Remler & Van Ryzin, 2011:107). Face validity was used to establish whether the PRYM can be used to establish the pathways that service-use provides for the development of resilience in South African youth in the QwaQwa and Bethlehem districts (Leedy & Ormrod, 2010:92; Maree, 2007:217; Remler & Van Ryzin, 2011:106). Chapter 3 gives more detail with regard to reliability and validity.

1.5.2.8 Ethical considerations

Ethical clearance was obtained from North-West University for the Pathways to Resilience Research Project (*NWU-00066-09-A2*) and the Department of Basic Education in the Free State Province (see Addendum B). Consent forms (see Addendum C) which fully explained the purpose of the research were sent to the parents and guardians of the selected participants, collected by the staff members of the different schools and NGOs and handed to Dr Malindi (ICURA Advisory Committee, 2010a). During the data collection sessions the scope of the project was explained to each participant in his/her mother tongue. It was clearly stated that no one would be forced to complete the questionnaire against their own will, or forced to answer a question in the PRYM if they did not want to. The participants did not have to indicate their names on the questionnaire, this ensured anonymity. Each participant who completed a questionnaire received a small meal to thank him/her for participating as agreed by the project advisory panel (ICURA Advisory Committee, 2010a).

1.6. Definition of key concepts

Key concept	Definition
Risk	It is emotional difficulties which individuals experience, as well as poor functioning such as distinct life events, individual characteristics or circumstances in a person's environment which lead to negative outcomes (Carbonell <i>et al.</i> , 1998:252). It is the increased probability of a negative outcome in a population or community or individuals, which can directly increase the likelihood of a maladaptive outcome (Compass, 2009:264). Risk can also refer to certain variables which might lead to the increased likelihood of psychopathology or susceptibility to negative outcomes (Boyden & Mann, 2005:7).
Resilience	Refers to positive adaptation in the context of challenge (Masten & Gewirtz, 2006:1). Resilience refers to the process that enables adaptation within an adverse situation (Luthar <i>et al.</i> , 2000:543). A positive response to risk factors or under unfavourable conditions (Carle & Chassin, 2004:579). Resilience is defined as in the presence of significant adversity which puts adolescents at-risk for a negative outcome, like depression or criminal behaviour but also where the individual shows adaptation to this risk. This includes positive development which was not expected (Theron, 2011a:3-4).
Protective factors	Influences which modify or alter a response to environmental hazards that predispose negative outcome (Smith & Carlson, 1997:237). A protective factor is a quality or person that might lead to a positive outcome. For example, a loving aunt, suicide helpline, health insurance or a teacher at school, thus good things or people that make it easier for individuals to cope (Schoon, 2006:75; Compass, 2004:264).
Services	Services are seen as programmes or interventions which offer support to youth towards wellbeing and developmental progress (Brown <i>et al.</i> , 2009:289). Services are usually identified as programmes (outpatient or day programmes) or as service items (medication or psychotherapy). Services are seen in the light of programmes of a health or mental health nature which individuals can benefit from (Flisher & Gevers, 2010:146).

Table 1: Definitions of key concepts

1.7. Preliminary chapter divisions

The following are the provisional chapter divisions:

1. Introduction and orientation
2. A contextual understanding of resilience in South African youth
3. Research design and methodology
4. Research results
5. Interpretation and discussion of the findings
6. Conclusions and recommendations

CHAPTER 2

A CONTEXTUAL UNDERSTANDING OF RESILIENCE IN SOUTH AFRICAN YOUTH

2.1 Introduction

The aim of this literature study is to provide a contextualised understanding of resilience and to gain a deeper understanding of which services are associated with resilience for young people in South Africa. Since the focus of this study is on South African youth and resilience, the chapter is introduced with a brief discussion defining resilience as well as adolescence as a developmental phase. This is followed by a discussion of the adversities faced by South African youth in relation to different aspects of community.

The adversities faced by South African youth are followed by a discussion of research which has already been done on resilience internationally and in South Africa, with a focus on the protective factors and processes which influence the way in which young people navigate their way to resources, and negotiate for others which they may need, in their environments in culturally acceptable ways. This is then followed by a brief review of resilience research done in South Africa, concluding with a focus on service-use and resilience.

2.2 Defining resilience as a construct

In the 1960s and 1970s psychologists who studied children growing up in high risk environments found that some of these children developed well despite the adversities they faced. These findings challenged the deficit-focused models and negative assumptions about the development of children in adverse circumstances (Masten, 2001:227). The researchers, according to Howard and Johnson (2000:1), began to ask: *“what it was about these children and adolescents that enabled them to survive and what enabled them to cope with situations that apparently affect other children negatively”*

Due to the limited knowledge that psychologists had about what makes life worth living, and their efforts to understand what makes people survive and endure adverse conditions, these children were seen as remarkable individuals, with extraordinary strengths. They were described as “invulnerable” (Pines, 1997:7) and “Superkids of the ghetto” (Buggie, 1995:1164), which suggested that they were shielded against any type of stress at any particular time (Masten, 2001:227). Based on these assumptions researchers named and

described the phenomenon resilience. According to the Harvard Mental Health Letter (Anon, 2006:5), *resilience* indicated the ability to endure stress and bounce back. In one of the earliest references to *psychological resilience*, published in the *Washington Post* on March 7, 1976, individuals who displayed such resilience were referred to as “the invulnerables”. The headlines read: “Trouble’s a bubble to some kids”. So, early researchers of resilience saw this concept as a supernatural phenomenon, but later on researchers acknowledged that resilience might be much more commonplace than researchers first thought (Masten, 2001:227).

In summary, resilience was first viewed by researchers as a person-centred process but later understanding evolved into conceptualising resilience as a person-ecological transaction, which will be dealt with later in this chapter. Likewise, Luthar *et al.*, (2000:543) referred to the phenomenon of resilience as a dynamic process encircling positive adaptation within a context of risk. These definitions highlight two important aspects of resilience: resilience is a process of adjusting well; and it can only be identified in the presence of risk that would typically lead to negative outcomes.

Masten *et al.* (1990) and Besthorn (1999:122) investigated the different kinds of risk and hazards which might lead to negative outcomes. Many initially focused on a single indicator to define risk, but soon realised that multiple risks occur more and more. This shifted the focus more to cumulative risks (Masten & Reed: 2005:77). In the presence of multiple risks, negative outcomes were more likely than in the presence of single risk. Risks are usually contextually bound and generally result in negative outcomes. Risks can also be the result of personal as well as ecological factors (Donald *et al.*, 2010:158; Fergusson & Horwood, 2003:140; Masten & Reed, 2005:77). Examples of risk include:

- Premature birth
- Divorce
- Maltreatment
- Parental illness
- Homelessness
- Inadequate housing/hygiene
- Inadequate access to health services
- Poor parental education / information
- Single parenthood

- Unskilled socio-economic status
- Physical violence or threats of physical violence between parents
- Child abuse
- Poverty
- Teenage parenthood
- Sick parents
- Massive trauma such as war or natural disasters (Donald *et al.*, 2010:158; Fergusson & Horwood, 2003:140; Masten & Reed, 2005:77)

Although resilience needs a context of risk, researchers have mainly focussed on the positive; in other words show young people adjust well to this risk. The construct of psychological resilience could therefore be embedded in the positive psychology movement that was developed in the early 1990s by Seligman and his colleagues. The focus of this movement is primarily on the scientific research of human strengths and happiness (Seligman & Csikszentmihalyi, 2002:3-9). The founders of the positive psychology movement followed in the footsteps of well-known researchers such as Abraham Maslow, Carl Rogers and Erick Fromm who critiqued the focus of psychology on negative behaviour. Maslow (1954:360) for example stated that *"If one is preoccupied with the insane, the neurotic, the psychopath, the criminal, the delinquent, the feeble-minded, one's hopes for the human species become perforce more and more modest, more and more realistic, more and more scaled down. One expects less and less from people. From dreams of peace, affection, and brotherhood, we retreat"*.

In summary, resilience can be described as a pattern of positive adaptation that is maintained amidst considerable adversity experienced either in the present or in the past. It should be kept in mind that multiple researchers have pointed out that positive adaptation will have different meanings according to the culture or context an individual will find him/herself in (Boyden & Mann, 2005:9; Donald *et al.*, 2010:164; Masten & Reed, 2005:82; Ungar & Teram, 2005:149).

2.3 Contextualising the study of resilience in South Africa.

The focus in this study will be on the resilience in a group of South African adolescents who are between 12 and 19 years of age. Adolescence development will be described briefly with particular reference to psychosocial wellbeing and cultural differences. Furthermore the adversities that these adolescents have to face within the South African context will be discussed.

2.3.1 Adolescence as a developmental phase

Pienaar *et al.*, (2006:394) describe adolescence as a “complex developmental stage during which significant physical, psychological and social changes take place” that will either enable or disable individuals from coping in adverse situations. Adolescence is the phase in which young people start asking the question: “Who am I?” as indicated by the psychosocial developmental crisis of adolescence described by Donald *et al.*, (2010:64) as identity vs. role confusion. Identity is characterised by certainty and acceptance of characteristics, social identity and values. In this phase youth ponder “How do I compare to others?”, “What is my new relationship with my parents?”, “What have I accomplished?” or “Where do I go from here?” If they find the answers to these questions, their behaviour will be seen as acceptable, pro-social and supportive to others. They will find themselves reflecting on values, emotions, truths and ideals. If not, they will find themselves not sure of their personality, not self-assured and self-doubting. It could also lead to not reflecting on the consequences of their behaviours (Louw & Louw, 2007:20).

The following developmental tasks are essential for the development of psychological well-being in adolescents (Donald *et al.*, 2010:68; Havighurst, 1972:2; Louw & Louw, 2007:278; Sebald, 1968:3)

- Development of gender roles
- Development of mature relationships with both sexes
- Learning socially acceptable and responsive behaviour
- Development of a value system
- Independence from parents
- Choosing a career
- Preparation for long term intimate relationships

- Accomplishments of intellectual tasks needed for effective functioning

According to Richter (2006:1902), young people in this phase constitute the biggest age group in the world. In 2005 estimates showed that adolescents make up 20% of the world population. Of these adolescents 85% lived in developing countries such as South Africa.

Furthermore attention should be given to culture; it refers to beliefs, norms, customs and a general way of life; one culture differs from another and so the developmental outcomes might differ from culture to culture (Louw & Louw, 2007:12). It should therefore be taken into account that the developmental process in adolescence might be influenced by the culture of the environment in which children grow up. For example, in traditional African communities there would be a collectivist focus and the needs of the broader group are seen as much more important than the need of the individual. This might be in contrast with the individualistic approach of western societies, where individuals are perceived as separate entities that are mainly concerned with their own needs (Masten & O'Dougherty Wright, 2010:219; Ungar, 2008:218). However, a golden rule in psychology is that everyone is unique, even inside the same culture or context, and thus culture will not neutralise uniqueness (Louw & Louw, 2007:11-13).

When looking at developmental tasks, physical as well as psychosocial changes which take place during adolescence; also known as puberty, have an important influence on development with regard to individual differences such as growth, educational attainment, self-esteem, peer influences and family cohesion, even in different cultures and contexts. Negative physical and psychosocial development might lead to negative outcomes which could place adolescents at-risk. When these challenges are added to ecological risks like poverty, or crime, then, as noted in the preceding section of this chapter, young people are more vulnerable (Masten & Reed, 2005:77).

However, research has found that good nutrition, healthy lifestyle, positive family and school influences and access to supportive services can help youth break the unhealthy patterns and enhance their well-being. Yet more is currently available about what hinders the development of the youth than what is keeping them on the right track (Richter, 2006:1902-1904). These adversities are discussed as a backdrop to understanding resilience from an ecosystemic perspective.

2.3.2 Adversities facing South African youth

Risks can be the result of personal and/or ecological adversities (see par 2.2). In this section the main focus will be on the adversities most often reported in the Eastern Free-State,

South Africa. The adversities which South African youth (Eastern Free-State) face are discussed with reference to poverty, education, health and wellness as well as crime and violence (Department of Social Development, 2005:2).

2.3.2.1 Poverty

It is difficult to define poverty however, for the purposes of this study; poverty is understood as the lack of financial and material support (Louw & Louw, 2007:365). South Africans who grew up in high levels of poverty and deprivation, report that they did not have enough money to buy sufficient food and clothing during their childhood. Trevor Manuel (Department: The Presidency, 2010:9) stated that South Africa does not have one identifiable poverty line, but less than \$2 a day or R524 per month serves as a rough guide for this purpose. He further mentions that in 1998, 53% of the population were living below this line and only rose to 48% in 2008. For a middle income economy this is a very high level of poverty. Furthermore, Donald *et al.*, (2010:152) state that 28.5% of household units in southern Africa are earning less than R800 per month and the unemployment rate is more than one quarter of the allowed working class, thus more than 4.6 million people and their families are affected by poverty.

Analysts apparently agree that more than 40% of all South Africans live in poverty and that the urban-rural location plays a significant role in poverty levels; where the majority of poor individuals live in rural areas (Department: The Presidency, 2010:9). According to Van den Berg, (2008:145-146), due to the high incidence of poverty in rural areas individuals who live in these areas face high levels of unemployment and experience lack of basic services (Van den Berg 2008:145-146). Trevor Manuel furthermore states that there is a high correlation between poverty and educational attainment, for an overall rate of 54–68 % of those with no education, live in poverty (Department: The Presidency, 2010:7).

Another adversity associated with poverty is the variety of health problems experienced by poor children, due to the lack of adequate health care service at their disposal (Louw & Louw, 2007:366). Research furthermore indicate that there is a relationship between poverty and children's IQ's, as well as lower academic achievement. These children are also more likely to develop social and emotional problems, such as low self-esteem, limited self-confidence, drug abuse and mental disorders.

In view of the above it is evident that a vicious cycle exists, that makes it difficult to achieve a higher level of education if a person does not have sufficient financial support; thus young people who live in poverty find it difficult to rise above the poverty levels they experienced in their childhood (Donald *et al.*, 2010:156).

2.3.2.2 Education

Biddecom and Bakilana (2003:7) found that more and more youth have some form of schooling, when comparing today's youth with the older generation. Yet, after almost sixteen years, the education system is still battling with insufficient infrastructure, curriculum changes and shortage of institutions for black learners. Rural schools have a greater disadvantage due to the large number of backlogs in service providing as well as infrastructure such as school buildings, electricity and running water (Perry & Arends, 2003:314).

Even after the abolishment of apartheid, social and economic exclusion of a majority of the South African population still pertains, due to the quality of education that they receive. Although many efforts have been made to improve the quality of education, many challenges prevail. Despite various changes in the education system it has been found by Barnes (2011:2) that much is still lacking to improve the quality of instruction that will bring out the potential within every learner.

The problem of quality in education was highlighted by the low literacy scores obtained by South African learners in the Progress in International Reading Literacy Study in 2006. The study found that South African Grade 4 and Grade 5 learners scored the lowest of all 45 participating educational systems, where the girls scored slightly higher than the boys. The South African Grade 5 learners did not achieve the international average score in the study. Concurrently they found that learners with parents who are educated, with a dual income and those who had more access to educational resources had a better chance of succeeding in attaining good literacy levels (PIRLS, 2006). However support in the family contexts is also jeopardised by the fact that, due to their low level of literacy, the older generations have great difficulty to help their children with regard to educational tasks and projects (Department of Social Development, 2005:2; Richter *et al.*, 2005:159).

Furthermore there is a perception that the schooling system is not safe enough and do not sufficiently support the needs of those involved in education as indicated by Pillay (2011). Cases of bullying, fighting with weapons and high levels of vandalism make it difficult for learners to come to a school and receive the education they so desperately need and strive for (Emmett, 2004; Flisher & Gevers, 2010:146).

Even though a larger number of learners have access to education, access to quality institutions are still mainly reserved for some privileged groups (Percy & Arends, 2003:305). More than half of black South African youth are not studying either in secondary or tertiary institutions due to financial implications and this keeps the vicious circle of illiteracy alive (Department: The Presidency, 2010:13; Richter *et al.*, 2005:79). It is furthermore important to note that the number of female learners has increased from the beginning of the post-apartheid era, while fewer males are enrolled in tertiary institutions. Although we have a

higher rate of educated youth, it has been found that even individuals with a tertiary education have felt the blow of unemployment, and this has especially been felt by the younger black South Africans (Department of Social Development, 2005:2; Department: The Presidency, 2010:13).

2.3.2.3 Health

The health of young people in South Africa is threatened by their smoking and drinking habits which seem to have taken on alarming proportions (Fisher & Gevers, 2010:146). In some adolescents smoking comes into play early in their lives which opens up the pathway to the use of narcotics (Richter *et al.*, 2005:179). Alcohol use is also on the increase and statistics indicate that more than a third of young men and women drink alcohol on a weekly basis in South Africa. The use of alcohol is usually followed by the use of recreational drugs (Richter *et al.*, 2005:179; Williams & Atkinson, 2009:78).

Young people have been found to be sexually active at early stages in their lives: by the age of 15 years 10.1% are sexually active and this increase to 60.1% by the age of 19. This behaviour increases the likelihood for pregnancy and the responsibility of parenting at a young age (Panday *et al.*, 2009:19; South African Institute of Race Relations, 2011:9).

Many sexually active youth are still in school (Richter *et al.*, 2005:19) and for teenage mothers the likelihood of dropping out of school is 1.940 times higher than for teenage fathers. In South Africa more than 50% of female youth were still in school when their first child was born (Donald *et al.*, 2010:252). The following barriers exist against which teenage fathers must fight: They are seen as chief financial provider and must care for their child(ren) and with the high unemployment rate and not finishing high school education, this is an uphill battle (Panday *et al.*, 2009:42). Furthermore, according to research youth who drop out of school are more likely to become HIV positive than their peers that stay in school (Richter *et al.*, 2005:186; Donald *et al.*, 2010:252).

A major concern regarding the mental wellbeing of South African youth is that there is an increase in suicides in low and middle income countries, which is a huge risk factor for the youth of South Africa (Swartz & Hermann, 2010:171). The National Mortality Surveillance System (2005:2) found that 10.71% of all deaths during January 2005–December 2005 were due to suicide and 8.35% of all suicides were youth aged 15-19 years. Sookha (2005) states that individuals self-mutilate due to the fact that they don't want to deal with the psychological issues they face. These statistics give us an idea of the emotional health risks faced by youth in South Africa.

South Africa has an 8.7% HIV prevalence rate among 15-24 year-olds and only Botswana, Lesotho and Swaziland have higher youth HIV prevalence rates than South Africa (South African Race Relations 2011:10). Only a third of young people have been tested for the HIV virus (Lovelife, 2011), but a smaller number actually know their status. Shinsana *et al.*, (2009:51) state that only 43.5% of males and 40.6% of females in South Africa are knowledgeable about HIV/AIDS prevention. On the other hand it is really encouraging that the adoption of HIV preventative behaviour among the youth is increasing; this includes the use of condoms and/or contraceptives for the age group of 18-24 years (South African Institute of Race Relations, 2011:10).

Reddy *et al.*, (2010:106) found that as many as 8.4% of all learners were underweight and that 13.1% were underdeveloped which is reflective of poverty in their communities. Poor health and nutrition, low levels of education, difficulties with access of services as well as the social isolation that goes hand in hand with HIV/AIDS, impact on many levels of education (Donald *et al.*, 2010:319). The health status of learners is a critical issue that is addressed by the School Health Policy. The focus of this policy is to provide access to health services and to assist in education and health promotion (Tshabalala-Msimang, 2004; Department: The Presidency, 2010:7).

It should be kept in mind that youth who find themselves in rural areas with little education, a low household income and not working, are associated with a poor level of self-rating general health. If we consider all these adversities relating to young people's health, it is evident that preventative measures should be put in place to curb this growing issue (Department: The Presidency, 2010:9; Richter *et al.*, 2005:185).

2.3.2.4 Crime and violence

South Africa is regarded as one of the most dangerous countries in the world, where a third of all crimes recorded are categorised as violent crimes. During the period 2009/2010, 2 121 887 serious crimes were reported in South Africa, a third (31.9%) were contact crimes, 26.1% were property related crimes, 25.5% were other serious crimes and 16.5% were crimes that were detected as a result of police action (SAPS, 2010:1).

It has been estimated that crime is levelling off, but it still remains a high percentage compared to other countries of the world (SAPS, 2010:3; Richter *et al.*, 2005:204-205). When looking at the different provinces, the crime levels are unevenly distributed, mostly in the Western Cape and Gauteng. More recently KwaZulu Natal and the Northern Cape have joined the ranks of the highest levels of crime, and on the other hand we have Limpopo with the lowest crime rate of all the provinces (SAPS, 2010:3).

The SAPS (2010:3) found that 192838 cases of common assault were reported during the 2009/2010 period. This is a decrease of 29.8% from the 2003/2004 period. But the National Injury Mortality Surveillance System (2005:5) found that in the 15-24 year age group, where the cause of death was violence, 44.8% of fatalities were due to sharp force injuries and 40.2% to firearms. Furthermore, 44.8% of overall deaths were due to violence and homicide.

The National Injury Mortality Surveillance System (2005:2) has shown that there is a clear relation between violence, injury, age and gender. Male adolescents are more involved in high crime acts. It was found that 48.8% of the deaths of 15-24 year olds were due to violence

Crime and violence have infiltrated schools. Newspaper articles such as “Johannesburg boy shoots fellow pupils” (SAPA, 2011a), “Stabbed school boy dies” (SAPA, 2011b), “Boy murdered in Mpumalanga school” (SAPA, 2011c) support this statement. Violence in schools aren’t only students on students but the South African Race Relations (2001:7) found in their study that 52% of South African youth have been physically punished by either a teacher or a principal.

Young people are not only victims of crimes but are also perpetrators of these, and are often sentenced for these violent acts. In June 2002, 36% of the prison population were younger than 16, while 53% of those awaiting trial were of the same age (Richter *et al.*, 2005:223). There are various arguments on the reasons why South African youth are participating in these criminal and violent acts. Some researchers argue that apartheid, contributed to the high levels of poverty through the exploitation of people (Bhana, 2010:135; Richter *et al.*, 2005:223-225). In the process young people are left without direction in life, and lack self-esteem and self-worth. In response some young people spend more time on the streets, and come into contact with gangs, in search of sources that will provide them with social status even if it means turning to violent and criminal deeds (Du Toit, 2003), while on the other hand some tend to strive towards a more luxurious lifestyle.

Evidently unemployment and poverty has both a social and psychological impact on individuals. Being unemployed and poor might contribute to a sense of disempowerment. Concurrently unemployment and poverty are associated with disruption of family relationships, the deteriorating of social values and racial and gender tensions. Youth will go out and seek other sources that will provide them with social status even if it means turning to violent and criminal deeds (Du Toit, 2003).

2.3.2.5 Conclusion on risks

In view of the aforesaid, it is clear that many youth in South Africa are facing serious adversities. We deal with children not being able to attend school due to financial limitations, as well as infrastructure within a school not being able to meet the needs (Department: The Presidency, 2010:10).

Crime and violence levels within school are dangerously high; students are scared to come to school, out of fear of being shot, bullied and even being mugged. These feelings of fear are transferred onto their daily lives with regard to their academic achievement. It proves that crime and violence is an intertwined issue, that one adverse situation flows over to other dimension of their lives (SAPS, 2010:1-3; Bhana, 2010:135).

We are dealing with more than 40% of the South African population being deemed poor. This seems to fuel criminal and violent behaviour within the youth of today. As mentioned earlier it seems that because of this level of poverty youth are looking for ways to compensate for their lack of self-esteem and values; they are willing to venture into risk behaviours to fulfil these needs in any way possible. The nature of these crimes and criminal acts are becoming more violent, young people protect themselves by using weapons, and this becomes a part of their daily lives (Department: The Presidency, 2010:26; South African Institute of Race Relations, 2011).

Also due to the high levels of poverty we have a situation where the youth of today are going to school without sufficient nutrition. The South African Government is dealing with this issue by implementing nutrition programmes in many schools. Not only is nutrition an issue with youth, but sexual activity is very much prevalent in younger Africans. This increases the likelihood of pregnancy; which could lead to school dropout and even worse, becoming HIV positive (Reddy *et al.*, 2008).

According to Petersen *et al.*, (2010:vii) and Bhana, (2010:138) the mental health of South African youth has not been given sufficient attention. It seems that the number of adolescent suicides is escalating and this is an indication that some youth are not dealing with issues in their lives, or worse, do not know how to deal with such issues. Issues such as unemployment, crime, being assaulted, not having sufficient food, being HIV positive, no finances for further schooling are just some of those the youth of today are facing (Bhana, 2010:138).

Yet, despite these traumatic experiences, some young people tend to do well, and are therefore regarded as resilient individuals. In view of the lack of educational, therapeutic and other resources within South Africa, resilience is crucial. Research has shown that the ability to adjust well to traumatic events or ongoing hardship in one's life is nurtured by multiple

resources that protect against these negative events (risks), and that these resources might be embedded in cultures or even the particular community that individuals might find themselves in (Masten & O'Dougherty Wright, 2010:210). International researchers have already become attentive to how resources that promote resilience are culturally and contextually embedded. However, in South African research on resilience, little attention has been paid to how resources are culturally and contextually embedded. This gap needs to be addressed so that health care professionals in this country will be equipped to enable youth to become resilient beings (Theron & Theron, 2010:1).

2.4 Understanding resilience as a multi-dimensional construct

2.4.1 The development of resilience as a construct in international studies

The resilience movement developed through different stages. The first stage, as noted in the beginning of this chapter, is identified by the understanding that resilience is an individual personality trait; this includes skills and genetics influences. Anthony (1987) as cited in Ungar (2008:2) did research on resilient children and concluded that because of individual capacities they were invulnerable. Masten and O'Dougherty Wright (2010:214) add that this stage was characterised by the defining and measuring of resilience. Researchers mainly tried to identify differences between those who did well in the face of adversity, and those who did not. Understanding resilience merely as an individual trait was critiqued by Hetherington (1991), Garmezy (1983) and Rutter (1987) as cited in Ungar *et al.*, (2008:2). In their work with children who are irritable and easily unsettled by change in the environment, they found that resilience implied more than individual personality trait influences. This initiated the second stage in the development of resilience as a construct.

The next phase of resilience research shifted the attention away from the individual. Researchers explored what in the child and the child's environment (i.e. family, community, culture) might offer protection against risk. In this stage markers of good adaptation as well as potential assets and protective factors associated with resilient children emerged (Masten & Obradović, 2006:14). Some of these protective factors associated with resilience are listed in Table 1 (Masten, 2004:315; Masten & Coatsworth, 1998:205-220; Masten & Powell, 2003:13).

Individual strengths	Family resources	Community resources	Cultural resources
Cognitive, attention and problem-solving skills	One or more effective parent(s)	Quality of services and health care	Beliefs that have meaning
Effective emotion and behaviour regulation & good self-regulation	Socioeconomic advantages	Prosocial friends	Religious faith and affiliations
Positive self-perceptions	Connections to other competent and caring adults	Effective schooling and bonding	
Cognitive abilities (IQ scores, attention skills etc)	A family that encourages competence	Effective community	
Temperament and personality	A family that has a strong, coherent and consistent set of values	Neighbourhood quality (public safety, collective supervision, libraries and recreation centres)	

Table 2: Protective resources as found in international studies

As can be seen in Table 2, resilient youth were identified as children with a moderately stable temperament, which provides a solid foundation for the development of a healthy personality. They also have good self-regulation skills that help them cope with stressful events in more constructive ways (Deater-Deckard & Smith, 2006:50-52) and use appropriate coping strategies when faced with stressful situations. Smith and Prior (1995:168-170) argue that children who have good self-regulation skills are more social and therefore attract the attention of people who might help them cope in more stressful situations. These social relationships will then help them become “double protected” amidst adversities.

As can be seen in Table 2, protective factors were also perceived as resources (like persons, relationships, cultural values and services) that might facilitate positive outcomes in the wake of adversity. For example, a loving aunt, suicide helpline, health insurance or a teacher at school, thus resources in the child’s ecology that make it easier for individuals to cope (Schoon, 2006:75; Compass, 2004:264). However, as Masten and O’Dougherty Wright (2010:214) report, the limitation of this phase was that it merely provided a list of protective resources. This list could not explain how resilience came about. This led to the third stage.

The focus in this third stage moved from protective factors to the protective mechanisms that predicted resilience and *how* these mechanisms buffered the effects of the risks these children faced (Ungar *et al.*, 2008:12). Masten and O'Dougherty Wright (2009:214) refer to this stage as the time when “how” questions were asked, and the focus fell on identifying and understanding the processes that might lead to resilience. This stage has evolved into the study of multiple levels of protective- and neurobiological processes.

To answer the “how” questions, many models were suggested. Because researchers did not reach consensus on which model explained resilience, only three will be described below, by way of example. Firstly the *Compensatory Model* suggests that a protective factor helps an individual to compensate for high levels of stress in the face of risk. For example, if a learner is experiencing stress due to the passing of a parent, a teacher or friend could offer support and this can compensate for the stress they are experiencing (Cook & Du Toit, 2005:249; Theron, 2006:199).

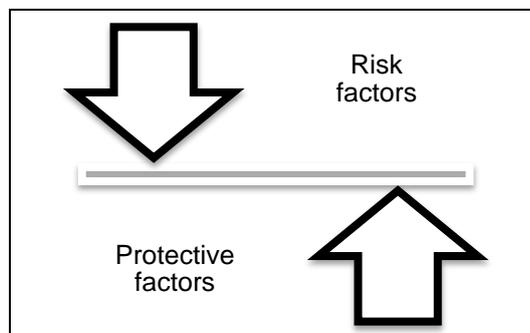


Figure 2: Compensatory Model

Secondly the *Challenge Model* explains that the exposure to moderate stress strengthens the individual. When the individual is exposed to manageable amounts of difficulty, this offers opportunities to experience successful adjustment to hardship. In this way the ability to cope later in life with more stressful situations is encouraged. This can be seen in the ways in which children that face adversities; cope with future stressors. For example a child who faces moderate amounts of stressors in life, might cope better with bigger stressors later in life due to the fact that he/she has been conditioned into coping in such situations (Cook & Du Toit, 2005:249).

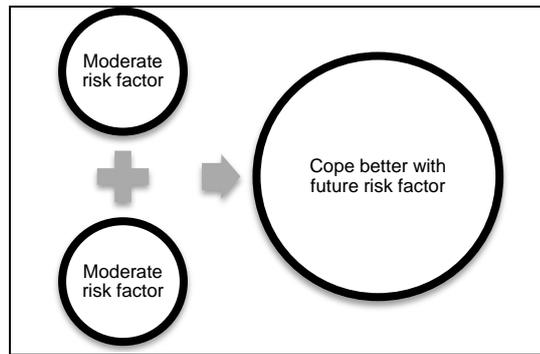


Figure 3: The Challenge Model

The third example, the *Protective Factor Model*, suggests that protective factors develop an environment where children in adverse situations develop a buffer which may restrain the risk experienced. For example, a supportive parent might buffer the stress of a learner with a disability (Cook & Du Toit, 2005:250).

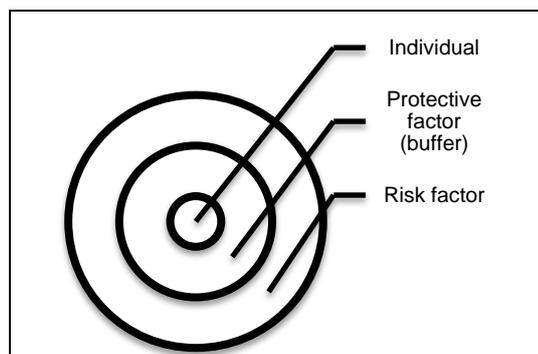


Figure 4: The Protective Model

The “how” question was not only answered through the development of various models. Researchers, like Gorman-Smith and Tolan, (2003) Lerner and Benson, (2003) and Rutter, (2005) began to explain that resilience should be perceived as an interaction between the individual and the environment, which also includes a particular culture. They argued that the community, as well as social institutions such as schools, clinics and other services, have a significant effect on people’s resilience. They furthermore suggested that culture affects the way that people might cope in stressful situations, as they act in a manner based on their values, beliefs and everyday practices that are bestowed on them. Masten and Obradović (2006:14) report that this third stage also focused on promoting resilience through prevention, intervention and policy. Understandings of how resilience came about were tested by experimenting with processes to encourage resilience (Masten & O’Dougherty Wright, 2010:214). The need to understand resilience as a process evolved from a sense of urgency for the welfare of children growing up with adversities and vulnerability. Ungar *et al.*, (2008:2) support these ideas by suggesting that research in this stage moved on to how

resilience related resources affected children worldwide. The Resilience Research Centre suggested that the term resilience should be understood as an individual's capacity to use the resources provided in the environment by the community in culturally meaningful ways (Resilience Research Centre, 2010:1-2).

According to Donald *et al.*, (2010:166), Friesen and Brennan (2005:298-299), Masten and Powell (2003:20), Masten and Reed (2005:84), Sameroff *et al.* (2003:388) and Seidman and Pedersen (2003:337), three basic strategies for intervention are suggested by resilience research. They are: risk-focused strategies, asset-focused strategies and process-focused strategies. The characteristics of each strategy are indicated in Table 3.

Risk focused strategies : Preventing/reducing risk and stressors	Asset-focused strategies : improving number or quality of resources or social capital	Process-focused strategies : Mobilizing the power of human adaptation systems
Prevent or reduce the likelihood of low birth weight or prematurity through prenatal care	Providing tutors	Build self-efficacy through graduated success model of teaching
Prevent neglect or abuse through parent education	Organising a boys and girls club	Teach effective coping strategies for specifying threatening situations
Reduce substance abuse through community projects	Offer parent education classes	Promote secure attachments between infants and parents through parent training
Prevent homelessness through housing projects	Building a recreation centre	Cultivate mentoring relationships for children through matching them with potential mentors
Reduce neighbourhood crimes through community policing		Encourage friendships that will enhance the likelihood of participating in healthy activities
		Support cultural traditions that provide children with adaptive rituals and opportunities for bonds to form with adults through religious educations, traditional dance or meditation

Table 3: Three strategies used in resilience research

Currently, resilience research are mainly process-orientated since the focus is on individuals' capacity to navigate their way to health resources and their communities' capacity to provide these resources in a culturally relevant way (Ungar *et al.*, 2008:3). The current focus on how processes are shaped by specific contexts and cultures has come about because researchers have noted that too little is known about how resilience processes differ across contexts and cultures (Masten & O'Dougherty Wright, 2010:229; Ungar, 2011:13). In sophisticated societies, where advanced medical technology is available, researchers rather investigate how genes and neurobiological structures moderate ecological risks (Masten & O'Dougherty Wright, 2010:214).

2.4.2 Resilience research in South Africa

In keeping with how resilience research has moved to focus more strongly on how contextual and cultural influences influence the process of resilience. Masten and O'Dougherty Wright, (2010:229), Ungar (2011:13) and Theron and Theron (2010) reviewed South African studies of resilience conducted between 1990 and 2008. They found that the South African exploration of resilience is in many ways similar to that of international studies. Researchers in South Africa conceptualised resilience as the result of individual traits, the product of protective resources as well as the product of person-centred transactions. Furthermore, they noted that the research that was done in South Africa focused more on individual traits and protective resources than on the process of resilience (Theron & Theron, 2010:5). Finally, they encouraged researchers to explore how the process of resilience among South African youth is influenced by local culture, because in the studies between 1990 and 2008 this was neglected.

A number of later studies (Malindi & Theron, 2011; Phasha, 2010; Theron & Dunn 2010; Theron *et al.*, 2011; Theron & Malindi, 2010; Ungar *et al.*, 2011) did focus more specifically on how context and culture influence the process of resilience in South African children and youth. Table 4 below summarises the resources that have been reported as resilience-promoting in studies of South African child and youth resilience (Ebersöhn, 2010:286-289; Phasha, 2010:1235; Theron *et al.*, 2011:2; Theron & Dunn, 2010:235-241; Theron & Malindi, 2010:726-728; Theron & Theron, 2010:2-6; Ungar *et al.*, 2011:232).

Resources in the self	Family resources	Community resources	Cultural resources
Goal and/or achievement orientation	Mothers' capacity to bond with child	Schools, this include supportive teachers, a place where they feel safe, they can vent emotion	Religion : Religious leaders and personal faith
Empathy	Parenting practices such as authoritarian, permissive, democratic-authoritative	Community support, with regards to the idea of respect and support of youth's success. To provide opportunities for therapy, active support from peers and community mobilisation and community synergy	Extended families typical of indigenous African values
Optimism	Supportive family relationships, this includes joint participation, experiences of belonging, being loved, being valued within the family system, opportunities to pursue education and establishment of rules within the family.	Peers, this includes the social acceptance of positive identity and values	Traditional values of Ubuntu.
Autonomy	Bond with step- parent	Opportunities to enjoy, this includes sense of competency, sense of security and comfort and belonging.	Positive life philosophy
Conservatism	Parent (custodial/non-custodial) involvement	Academic achievement in school	Cultural acceptance of divorce
Conscientiousness and the ability to self-regulate	Peer support	School which encourages coping through extra-mural activities	Traditional cultural rituals

Resources in the self	Family resources	Community resources	Cultural resources
Extraversion and enthusiasm	Older siblings offering help and support	After school activities	Ancestral worship
Assertiveness		Social workers	Kinship system
Problem solving and positive cognitive appraisal		Psychological services	
Internal locus of control			
Sense of self-worth			
Preference for socially or system-appropriate behaviour			
Refocusing thoughts			
Acceptance of adversity that cannot be changed			
Not accepting responsibility for difficulty beyond own control / no self blame			
Emotional expression			

Table 4: Protective factors which emerged in South African studies of resilience

To summarise: South African studies report resilience as a transaction between youth and the ecologies they find themselves in. As seen in Table 4, youth use individual resources to navigate towards sources of support. This support is found in their families, extended families and communities (especially schools). It is important to note that resources available to youth are especially influenced by the cultural context they find themselves in.

Keeping the context of the ecosystemic framework in mind, the macro-system (e.g. culture) influences the above mentioned resources (see Table 4). For example, as seen earlier black youth report support from mothers and extended families, ancestral worship as contextual

realities (like absentee fathers) and cultural beliefs (like kinship values) that promote well-being (Department: The Presidency, 2010:13; Theron & Theron, 2010:5).

2.4.2.1 Service-use as a pathway to resilience

As noted in par 1.6, services in the context of this study are seen as programmes or interventions which offer support to youth towards wellbeing and developmental progress (Brown *et al.*, 2009:289). In this study services are identified as Health, Cultural and spiritual, School, Criminal justice, Social and Mental health services (Resilience Research Centre, 2010:1-9).

Studies done by Ebersöhn, (2010:358), Phasha (2010:1240), Theron and Dunn (2010:241) and Theron and Malindi (2010:725) report schools, psychologists, and social workers as instrumental to resilience. However, other than reporting that these services are associated with resilience, the South African resilience literature does not emphasise services. No research has been conducted on the correlation between these services and resilience of at-risk youth in the South African context.

A study done by Theron and Dunn (2010) affirmed educators and schools as resilience agents. When teachers counselled learners, youth kept their parents, peers, cultural and religious organisations close to support them. Furthermore they enabled learners to reflect on their situation and at the same time acquire literacy and life skills; this encouraged the resilience of learners whose parents were divorced. This same study reported that psychological intervention encouraged resilience in contexts of divorce (Theron & Dunn, 2010:240). Furthermore Ebersöhn (2010:358) mentions how psychological services, like quadrant mapping can help individuals view their risk and protective factors, as well as enable them to make resilient decisions for the future

A recent study about resilience in street children in South Africa found that street children were encouraged towards resilience by social workers and adults working in shelters for street children. This study reports that social workers were open-minded with regard to the individual's different ecologies, and they paid attention to the everyday assets which will help him/her sustain resilience as well. Furthermore they brought in the local community to play an active role in encouraging ecosystemic assets and this promoted the youths' resilience (Theron & Malindi, 2010:729-730).

Phasha (2010:1240), states that education had a special value in the lives of the Black female youth in her study. The learners embraced education as an essential part of protection against negative impacts of their situation and exhibited positive behaviour at

school; they were determined to succeed and had great educational and career aspirations. Phasha's study indicated the importance of schools as resources of resilience in South African youth.

Johnson and Lazarus (2008:19) did research on the role health-promoting schools play in building resilience in at-risk youth. Health promoting schools were characterised by healthy teacher-learner relationships, students themselves, teachers and parents and the school and its community. All of the aforementioned were reported to encourage learners' resilience.

In addition to how schools influence resilience in at-risk youth, Ebersöhn (2008:14) also found that safe schools promote resilience. Safe schools had the following characteristics:

- Facilitation of learning in schools: schools that uphold an academic climate for high expectations, mentorship and respect, which encourages community involvement and offer extramural activities and life skill programmes.
- Individual emotional aspects: internal locus of control, high self-efficacy, optimism, adaptive coping behaviour.
- Involvement in the community and schools: external resources in families, schools and communities.
- Assets in the various systems: playgrounds, gardens and committed, competent teachers.

In summary, what emerges clearly is the lack of information regarding the effect of service usage on the resilience among South African youth.

2.5 Summary

This chapter defined resilience, provided an overview of how resilience research has evolved, and summarised what is known about the roots and process of resilience among South African youth.

Ungar (2011:3) notes, that from an ecological systems theory approach, most resilience research has focused on the role of micro-systems (the family, peers and teacher, protective factors in most of the studies) in the resilience process. This is also applicable to the South African research on resilience.

Research on how macro-systems and services within these macro-systems correlate with resilience are limited as indicated (Cadwallader, 2011; Ungar, 2011:3). As noted in Table 4, this is true for South African too. In this study the gap in knowledge regarding the effect of

service–use will be addressed through the application of the method discussed in Chapter 3 which follows.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

A review of the literature indicated that research is still needed with regard to resilience and service usage in at-risk youth in South Africa. The purpose of this study was to investigate how resilience correlates (if at all) with service usage in at-risk youth within (inside) a South African sample. The research design as well as the methodology, which involved a cross-sectional survey, is discussed in this chapter. The context where the research was gathered, the manner in which participants were selected, the importance of the measuring instrument as well as the methods of data collection and data analyses are discussed. Issues of ethical considerations, reliability and validity are also addressed.

3.2 The research context

The research conducted in this study was part of a larger study titled the Pathways to Resilience Research Project, a collaborative project that involves researchers from Canada, China, South Africa, Colombia and New Zealand.

A multi-dimensional model to conduct research on the ways youth navigate their pathways to resilience despite adversities was developed by Ungar and Liebenberg (2011:127). The goal of the Pathways to Resilience Research Project is to facilitate an understanding of resilience as a culturally and contextually embedded construct from a socio-ecological perspective with the focus on understanding how youth negotiate their wellbeing amidst adversities within a particular culture.

As reported in Chapter 1 and 2, research was conducted in two sites; QwaQwa and Bethlehem, Free State Province, South Africa. Various contextual risk factors are present in these contexts. An indication of the risks is evident in the necessary improvements to basic services planned by the Government (Statistics South Africa, 2010) as indicated below.

- Water: all households to have clean piped water, at least 200m from the household
- Sanitation: all households to have at least one ventilated pit
- Electricity: all households to be connected to the national grid

- Housing: formalization of all existing informal settlements and provided with permanent basic services.
- Other (education, health, roads, transport, sport and recreation, street trading, parks, community halls etc): the standards of all social, governmental and economical services must be clearly defined, planned and implemented by each sector.

The way in which the Government has met the above minimum standards of basic services in the Free State province, Dihlabeng (Bethlehem) and Malut-a-phofung (QwaQwa) Local Municipalities is described in Table 8 below (Statistics South Africa, 2007:10-14):

Housing	Electricity	Water	Sanitation
71% live in formal dwellings	54.6% of households have access to electricity	98.8 % have access to piped water in some or other form in the Malut-a-phofung Local Municipality and 93.7% in the Dihlabeng Local Municipality	71 % in the Thabo Mofutsanyane District Municipality have access to sanitation in some or other form.
Informal dwellings decreased from 26.1% in 2001 to 18.4% in 2007.	78% of households use electricity for lighting, 66.7% for cooking and 41.9% for heating in Malut-a-phofung Local Municipality and 85.5 % used electricity for lighting, 70.1% for cooking and 51% for heating in the Dihlabeng Local Municipality.	44.5% have access to water in their dwellings in the Malut-a-phofung Local Municipality and 58.8% in the Dihlabeng Local Municipality	12.7 % still use the bucket system

Housing	Electricity	Water	Sanitation
Proportion living in informal dwelling in Malut-a-phofung Local Municipality decreased from 13.2% in 2001 to 7.9% in 2007 and 24.5% in 2001 to 11.5% in 2007 in the Dihlabeng Local Municipality.	Between 2007 and 2008 was the province benefitting most from the free electricity policy	5.4% increase in free water services to households, however second lowest increase in the country	3% have no access to sanitation at all
There is a major backlog in government providing housing to the province and young people			

Table 5: Basic services in the Dihlabeng- and Malut-a-phofung Local Municipalities

3.2.1 Services, schools and nongovernmental organisations taking part in the Pathways to Resilience Research Project in QwaQwa and Bethlehem regions

Various school, community partners and service providers in the Bethlehem and QwaQwa regions were helpful in the selection of participants. The various services, schools and nongovernmental organisations where participants were recruited are listed in Table 6.

Tshepong Yarona Shelter Street Youth	Ntsu High School	Khanyeng Intermediate School
Leratong Children's Home	L.K. Ntlabathi School	Thahameso School
Save the Children	Bodikela Junior Secondary	Thalabodiba School
Social Development Department	Khanyeng Intermediate School	L.K. Ntlabati School
Eden Ministries Children Home	Tlhorong Secondary School	Dihlabeng Development Initiative (DDI)
	Bethlehem Comprehensive	Bethlehem Comprehensive

	School	School
	Sekgutlong Secondary School	Bodikela Junior Secondary School
	Thsetsang School	Loch Lomond Primary School
	Maanankwe Secondary School	
	Glen Ash Combined School	
	Bluegum Bosch Combined School	
	Molapo Secondary School	
	Selelekela Secondary School	
	The Beacon Secondary School	
	Bethlehem Intermediate School	
	Thabo-Thokoza School	

Table 6: Services, schools and nongovernmental organisations participating in the Pathways to Resilience Research Project in the Bethlehem and QwaQwa regions

3.3 The research process

An overview of the research process for the larger project will be discussed briefly as a backdrop to the description of the research design and methodology for this study. The process involved four phases as indicated in Figure 5 below:

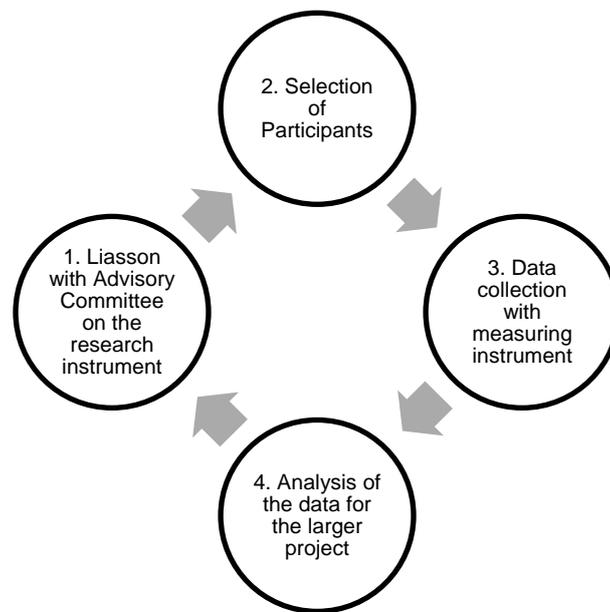


Figure 5: The phases in the research process

3.3.1 Phase 1: Selection of the measuring instrument

In the first phase of the Pathways to Resilience Research Project, a group of researchers involved in the South African Pathways to Resilience Research Project under the leadership of Prof Linda Theron of North-West University (Vaal Triangle Campus) met with the Advisory Committee of the project. The intention of this meeting was to discuss the use of the Pathways to Resilience Youth Measure (PRYM) and how it would be adapted for use in South Africa.

The instrument was developed as part of the Pathways to Resilience Research Project and incorporates various validated measures previously used in the Pathways to Resilience Research Project. The aim of this instrument is described as follow:

..to explore the pathways children and youth travel that lead to involvement with multiple mandated services such as child welfare, mental health, corrections and special education services and the pathways that protect them from that involvement. It will investigate the differences in how resilient and non-resilient youth “negotiate” for the social deterrents of health (e.g. secure attachments to caregivers, a sense of belonging to their community, personal control, adequate housing and educational opportunities) with their families, community organisations and service delivery systems that provide them support, treatment and care(Resilience Research Centre, 2010:1-2).

The PRYM measures the risk exposure, resilience as well as service-use over time (Resilience Research Centre, 2010:4-6). The original Cronbach Alphas (a statistical measure

that determines how reliable a measuring instrument is) are given in parenthesis (Cronbach, 1951).

The PRYM comprises various subscales; they are (Resilience Research Centre, 2010:2-3):

The Child and Youth Resilience Measure (CYRM), a 28-item instrument which was validated with a purposeful sample of 1451 youth who grew up facing different types of adversity in 11 different countries (Canada, USA, Colombia, China, India, Russia, Palestine, Israel, Tanzania, the Gambia, and South Africa). It has been found that an increased number of items increase the reliability values, but many published measures contained between four and 20 items (Warner, 2008). The reliability score for the original 20 CYRM items identified in an exploratory factor analysis was 0.87 and its sub-scales were as follows: Individual ($\alpha = .65$), Relational ($\alpha = .59$), Community ($\alpha = .73$) and Socio-cultural ($\alpha = .65$). Items are rated on a 5-point scale ranging from; 1=does *not describe me at all* to 5=*describes me a lot*. A higher result indicated higher levels of resilience, and a lower result indicated a lower level of resilience (Resilience Research Centre, 2010:2).

Strengths and Difficulties Questionnaire; (SDQ; $\alpha = .80$) this is a brief mental health screening questionnaire, which consists of five sub-scales. They are the Prosocial Scale ($\alpha = .66$), the Conduct Problems Scale ($\alpha = .60$) and the Peer Problems Scale ($\alpha = .41$). The Prosocial Scale is used to test the construct validity of the CYRM while the other two are included to assess different levels of risk. The participant can choose from a 3-point scale; 1=*not true* to 3=*certainly true* (Resilience Research Centre, 2010:2).

Youth Services Survey (YSS) is used as a descriptive measure which assesses the satisfaction of youth with regard to services as a whole over a specific period of time. The participant can use a 5-point scale, from 1=*strongly disagree* to 5=*strongly agree*. These questions are asked in a self-report measure for the purposes of this study (Resilience Research Centre, 2010:2).

National Longitudinal Study of Children and Youth Brief Questionnaire (NLSCY) provides different items to further test the construct validity of the CRYM and to participants with regard to their representatives. This includes descriptive information regarding peer activity, the nature of relationships and academic goals (Resilience Research Centre, 2010:2). A 12-item version of the *Centre for Epidemiological Studies Depression Scale, (CES-D-12-NLSCY; $\alpha = .85$)* was validated for the use with the NLSCY. This included the abilities to measure levels of depression among the participants which was rated on a 4-point scale; 0=*Rarely or none of the time* to 3=*All of the time*. This scale measures more favourably to the Beck Depression Inventory (Resilience Research Centre, 2010:2).

Finally, the *4HSQ*, from the 4-H study of Positive Youth Development was used to measure the level of delinquency ($\alpha = .73$, rated on a 5-point scale from 1=*Never* to 5=*5 or more times*) and risk behaviour, but more specifically substance use ($\alpha = .86$, rated on a 4-point scale; 1=*Never* to 4=*Regularly*). This includes positive behaviours like civic engagement (Resilience Research Centre, 2010:2).

The Advisory Committee and researchers involved went through the entire instrument to ensure that the wording was appropriate for the youth in the communities (ICURA Advisory Committee, 2010b).

3.3.2 Phase 2: Selection of participants

In the second phase of the project the participants were selected. A total of 1209 participants between the ages of 12 and 19 participated, as decided by the ICURA project. Participants were recruited in three different ways (Resilience Research Centre, 2010:4-2; Malindi, 2011):

- 200 participants were referred by service providers and non-governmental organisations (NGOs) such as shelters and children's homes that play a role in the communities. The Department of Social Development also provided the study with a list of individuals who volunteered to take part. The names of those youth referred to the study were communicated to Dr Malindi (an ICURA researcher and head of the field researchers) to ensure that double referrals did not take place.
- Community members were informed about the Pathways to Resilience Research Project during a meeting with Life Orientation and Life Skills educators, and those involved in school-based support teams in the QwaQwa and Bethlehem areas. They subsequently compiled a list of learners in their schools who volunteered to take part in the study; 224 learners were recruited.
- 785 participants were recruited in local schools. Letters were sent from the South African team members of the Pathways to Resilience Research Project to principals in the QwaQwa and Bethlehem areas (see Addendum C). The letter was accompanied by information regarding the study and what participation entailed. Principals who agreed to participate in this project assigned a person in their faculty to liaise with the team members.

3.3.3 Phase 3: Data collection

In the third phase of the project the data were collected. The data were collected by three Sesotho-speaking field workers who administered the PRYM (as discussed below). They were trained by Doctor Linda Liebenberg, Doctor Macalani Malindi, Professor Linda Theron and Professor Michael Ungar, who also supervised the administration process. The completion of the PRYM took more or less 50 minutes. The measure was adapted for the use of South Africans, with “Code Switches” (see below); specific words or phrases in the questionnaire in English that might be difficult to understand, were translated into Sesotho to make the question clearer (ICURA Advisory Committee, 2010b). The term “Code Switching” is used within the South African context to ensure that people from different language groups are included in conversations, when answering the PRYM:

- Affection (Sesotho-Lerato and Isi-Zulu-uthando were suggested)
- Bunk (“dotjha” derived from the English word, dodge)
- Nationality (botjhaba-Sesotho)
- Adoptive mother (mme eo o mo filweng ka molao)
- Guardian (mohlokamedi)
- Caregiver (mohlokamedi)
- Bunk (ho se ye sekolong ntle le tumello/dodge)
- Suspended (ho romelwa hae nakwana o sat le sekolong)
- Expelled (ho tejelwa sekolong)
- Mosque (kereke)
- Specialist doctor (ngaka e ikgethang)
- Counsellor (explained what he/she does-no Sesotho term)
- Psychologist (ngaka ya mafu a hlooho)
- Psychiatrist (ngaka ya mafu a hlooho)
- Home-based care (tlhokomelo ya lapeng)
- Occupational therapist (explained what he/she does-no Sesotho term)
- Speech therapist (explained what he/she does-no Sesotho term)
- Depression (kgatello ya maikutlo)
- Convenient (haufi-e moo e fumanehang ha bonolo)
- Community elder (moetapele wa setjhaba)
- Losing temper (ho teneha)
- Bully (dikgoka ho bana ba bang)

3.3.4. Phase 4: Data capturing

Finally, the data were captured in SPSS 19.0 and the analysis for the larger project is currently in process. The researcher is directly involved in this phase of the larger study.

3.4 Research design and methodology (for this study)

3.4.1 Research paradigm

A paradigm provides us with a framework for making sense of the world around us. It has also been seen as a “world view” or even a particular way a researcher sees the world in. Kuhn (1970) defined a paradigm as “the entire constellation of beliefs, values and techniques, and so on shared by the members of a community”. A paradigm thus shapes how we see the world around us as well as the community and fellow researchers (Williams, 1998:2).

The research in this study was conducted within the positivist paradigm. The ontological position in positivist research is objectivism. Positivism believes that objectivity is possible. The researcher as an objective external observer studies a part of a phenomenon to understand the whole, and explores commonalities and relationships in order to predict the social world around us. The intention with the application of the positivist approach was to remain detached from the respondents who participated in the research (Williams, 1998:3; Babbie, 2010:35; Krauss, 2005:759; Blaxter *et al.*, 2006:60; Gilbert, 2008:82).

However, since the statistics and data collected were also interpreted by the researcher, the positivist paradigm was complemented by an interpretivist approach, more commonly applied in qualitative research projects, but deemed important to allow for a more in-depth interpretation of the data (Babbie, 2010:35; Gilbert, 2008:137). The interpretative stance implies that the researcher as a social scientist also gave social meaning to a social action, by giving meaning to the data gathered in terms of the social context in which the data were gathered (Babbie, 2010:35; Krauss, 2005:761; Neuman, 2011:95).

3.4.2 Literature study

The literature comprises both primary and secondary and internet sources. The literature study provided insight into the different factors and characteristics that resilience entailed, and books, peer-reviewed journals and internet sources were used. The literature as well as the PRYM shaped the way resilience was viewed and how it might affect at-risk youth in the

areas investigated. Furthermore it will give me more insight into the data collected as well as the analysis. The results of the literature research are documented in Chapter 2.

3.4.3 Empirical study

Using a qualitative research design, the empirical research in this study focussed on the effect that service-use has on the resilience of at-risk youth in the QwaQwa and Bethlehem area. As noted in Chapter 1, (par 1.5.2.2) the main reason for applying a quantitative research design was to establish whether a correlation between the use of services and the level of youth resilience exists. The intention was to investigate the effect by determining whether certain services (if any at all) correlated with a higher resilience score, in youth who are at-risk.

3.4.3.1 Quantitative research

A quantitative research design was used. Quantitative research as an approach is objective and independent of an individual's thoughts and perceptions, and relies heavily on statistics and figures (Creswell, 2009:51; Williams, 1998:1) to assure statistical significance of an investigation. Gilbert (2008:35) regards quantitative research as a method that is used to answer questions about different relationships between variables with the aim of explaining, prediction or controlling a phenomenon. It is also therefore perceived as traditional, experimental or positivist. Instead of asking how, who and what affects resilience, the focus is on the identification of trends that indicate the effect service usage has on the resilience score of participants. There are different characteristics associated with quantitative research when compared to a qualitative design. Table 5 gives a summary of the differences between the two research approaches (Creswell, 2009:17; Leedy & Ormrod, 2010:96; Neuman, 2011:17).

Questions	Quantitative	Qualitative
What is the purpose of the research?	The purpose is to explain, predict, confirm, validate or test a theory	The purpose is to explain, explore, interpret or build a theory
What is the nature of the research process?	The nature is focused, the variables are known, established guidelines are set, methods are predetermined, the context is somewhat free and the view is detached.	The nature is holistic, variables are unknown, guidelines are flexible, methods are emerging in the study, context bound and influences by a personal view
What are the data like, and how are they collected?	The data is numeric and represents a large sample. It is also collected by a standardised instrument.	The data is textual or image based. Informative and sample is small. Very loosely structured or based on observations or interviews
How are data analysed to determine their meaning?	With the use of statistical analysis, stress on objectivity or deductive reasoning	With the use of themes and categories. It is acknowledged that analysis is subjective and potentially biased Inductive reasoning plays a role
How are findings communicated?	With the use of numbers, statistics, aggregated data and a scientific style	With the use of words, narratives, individual quotes and a literary style

Table: 7: Differences between quantitative and qualitative research

When conducting a quantitative study different research designs have to be considered. The different designs and the correlating purposes are indicated in Table 6 below (Gilbert, 2008:37; Leedy & Ormrod, 2010:108-183; Maree, 2007:291):

Design	Purpose
Observation studies	A particular observation is observed systematically and with as much objectivity as possible
Correlation studies	To determine if a relationship consists of two or more variables
Cross-sectional survey	Used when comparing people of different ages in a group
Longitudinal survey	Following a particular group over a long period of time
Survey research	Used to describe a incidence, frequency or distribution of a

Table 8: Differences in research designs

A cross-sectional survey (which focuses on the collection of data in one or more cases at a single point in time with regard to two or more variables) was used to gather data in QwaQwa and Bethlehem in the Free State Province, with the help of purposive sampling; sampling data with specific criteria in mind (Babbie, 2010:193; Remler & Van Ryzin, 2011:9,58,449). As mentioned in Chapter 1, a secondary data analysis was conducted in this study, thus the criteria for sampling are not applicable. A cross-sectional survey design was used because a particular population was observed at a defined period in time. This differs from case-control studies where the aim is to provide information on an entire population rather than only on participants who have certain characteristics. To summarise, the aim of the cross-sectional survey was to learn about a large population by surveying a sample of the population (Gilbert, 2008:373; Olsen & St. George, 2004:9; Shaughnessy *et al.*, 2009:152-153). The variables were then used to observe patterns of association, in this case a certain service that might influence resilience (Babbie, 2010:106).

The characteristics of a cross-sectional survey (Olsen & St. George, 2004:9; Shaughnessy *et al.*, 2009:152-155; Resilience Research Centre, 2010:4) and the way it was adapted for this study are presented in Table 7.

Design	Cross-sectional survey	We chose a cross-sectional survey because I wanted to identify any associations between resilience and service-use.
Purpose	To identify if service usage has a role in the development of a resilient adolescent	Looking at the resilience score as well as the service usage it was possible to identify services that might lead to higher resilience
Methods of data analysis	Data that interpret the research questions correctly	Calculating the resilience score of every participant with the use of SPSS and looking at the frequency which these participants used a variety of services
Methods of data collection	Standardized instrument (PRYM)	With the use of the PRYM it was simple to gather the data, enter it into SPSS and calculate the resilience score as well as their service usage
Focus	What influence does service-	To identify the association between

Table 9: Cross-sectional survey in this study

3.4.3.2 Selection of participants

The participants for this study included the whole population (1209 youth at-risk) that participated in the Pathways to Resilience Research Project in South Africa. Due to the secondary data analysis the criteria for selection applied in the larger project as discussed in par 3.3.2 also applied for this study.

3.4.3.3 Data collection

In this study Section B of the PRYM (see Addendum A) was used to identify the participants' service usage, this section asked the participants whether they had ever participated in a service in the past 12 months, and they could answer the following: 0= Never, 1= Once in my life, 2=A couple of times, 3= Three times or more or 99 = Needed but couldn't get it. This is then scored by a syntax developed within the Pathways to Resilience Research Project. Thus an overall score for every service as well as the service groups (Health services, Educational services, Social services, Mental health services, Criminal justice services and Cultural or spiritual services) where a MIN = 0 and MAX = 10 score, can be calculated (Resilience Research Centre, 2010:2).

Section C was used to calculate a resilience score for each participant from the PRYM, by using the following questions: B1, B2, B3, B4, B5, B6, B7, B8, B9, B22, B23, B24, B25, B26, B27, B28, B38, B39, B46, B47, B48, B49, B50, B51 (see Addendum A for specific questions). A score out of 115 is generated, where the MIN = 23 and MAX = 115 could be attained. This score is converted to a score out of 100, for logistical purposes. A higher score indicates a higher resilience level (Resilience Research Centre, 2010:2).

3.4.3.4 Data analysis

With the use of frequencies; this is best described as a table with classes and values that identifies the number of times that this class or value occurred in a specific dataset (Maree, 2007:52; Steyn *et al.*, 2000:57). Distribution of the participants with regard to gender, race, age, education levels etc. was calculated.

Descriptive statistics were used to calculate means and standard deviations of the constructs. Spearman's rank order correlation coefficient (it is used to discover the strength of a link between two sets of data) correlations between service-use and resilience in different groups were determined, as well as every service in the PRYM to explore relationships between them, as we only wanted to explore the strength of relationships and not necessarily the linearity of these relationships .A correlation is a statistical process that discovers the relationship as well as nature of different variables (Gilbert, 2008:217; Neuman, 2011:404; Maree, 2007:19; Leedy & Ormrod, 2010:273).

To explore these relationships further, data were divided into two different groups, the first group being those who fell in the first quartile and the second group those who fell in the third quartile with respect to their resilience score. Thus the participants who scored in the highest 25% in the first group and the participants who fell in the lowest 25% in the second group with regard to their resilience score. This enabled us to compare service-use with regard to higher and lower resilience scores in the sample.

Section B and C were used for the statistical analysis; Spearman's rank order correlation coefficient, t-tests, crosstabs and Cronbach Alphas were used to identify the association of resilience with regard to service usage.

Spearman's rank order correlation coefficients were used to determine the correlation between service-use and resilience in different groups. This included every service in the PRYM to explore relationships between them, as we only wanted to explore the strength and not necessarily the linearity of these relationships (Gravetter & Forzano, 2009:337; Maree, 2007:237).

Inferential statistics such as t-test; a test that determines whether two groups or samples are statistically different from each other (Maree, 2007:210; Shaughnessy, 2009:227,436), Odds ratios; this is a relative measure of risk, it is one of a range of statistical measures used to assess the risk of an outcome (Remler & Van Ryzin, 2011:259)and cross-tabulations (crosstabs)were used to establish whether a significant difference existed between service utilisation and the two different groups of resilience scores (Maree, 2007:185).

With the calculation of the effect size we determined the practical significance of the data analysed (Ellis & Steyn, 2003:51; Maree, 2007:210). Furthermore the statistical analysis was done by the SPSS 19.0 package (SPSS, 2010).

The Cronbach Alphas for this specific study are calculated during data analysis in Chapter 4.

3.5 Ethical considerations

Ethical clearance (*NWU-00066-09-A2*) was obtained for the Pathways to Resilience Research Project, as well as final approval from the Department of Basic Education in the Free State Province.

3.5.1 Informed consent from participants

Consent forms (see Addendum B) were handed out by Dr Malindi and field workers to be signed by all the participants after the nature and scope of the project had been explained to each participant. It was made clear that no participant was obliged to complete the questionnaire (or complete all questions) against his/her own will, neither be coerced in any way to do so, as described in Neuman (2011:149).

3.5.2 Confidentiality and anonymity

During the data collection participants' identity of the participants was not known, neither revealed to ensure anonymity. The consent forms were then collected separately to safeguard anonymity of all the participants. The information obtained in the questionnaires was kept confidential and will be safely stored at the offices of the Professor Linda Theron on the North-West University, Vaal Triangle Campus.

3.5.3 Recognition of participation

Each participant that completed a questionnaire received a small meal to thank them for their participation as agreed by the project advisory panel (ICURA Advisory Committee, 2010a)

3.6 Reliability and validity of study

3.6.1 Reliability

According to Neuman, (2011:214), Gilbert, (2008:32), Maree, (2007:216) and Leedy and Ormrod (2010:29) reliability refers to the consistency with which a measuring instrument (in this case the PRYM) generates a result. The reliability of the different measuring instruments in the PRYM was established with Cronbach Alphas. The Cronbach Alphas score will also

determine the internal consistency of factors within the measuring instruments of the PRYM and also the contribution of these items (Cronbach, 1951). The CRYM (imbedded in the PRYM) was tested in various countries such as Canada, USA, Colombia, China, India, Russia, Palestine, Israel, Tanzania, Gambia and South Africa (see par 3.7). Chapter 4 will specifically discuss the Cronbach Alphas with regards to the measuring instrument.

3.6.2 Validity

Validity of a measuring instrument illustrates to what extent the instrument measures what it is supposed to measure. With the use of content validity a standardised measuring instrument was used specifically adapted for South African rural groups by a panel of national and international experts. Face validity (does the measure look valid) was insured by explaining each question to the advisory panel (ICURA Advisory Committee, 2010a; Maree, 2007:217) and making adjustments; so that the wording as well as the meaning of the questions really describes what is supposed to be measured (Gilbert, 2008:32; Leedy and Ormrod, 2010:92; Neuman, 2011:212). Construct validity (how well the items covered in the measuring instrument are measured by the different groups of related items) was established by factor analysis by the international team (Maree, 2007:217).

3.7 Limitations

Three limitations are evident:

Firstly, the PRYM was not translated into the learners' mother tongue. The PRYM not being in the learners' mother tongue may cause serious doubts about the reliability of the data being analysed. We know that language is greatly influenced by customs and cultural diversities, and that history should be taken into account when we talk about language differences, or differences of our minds and mentalities. Thus, when speaking of not receiving instructions or answering questions that are not in your mother tongue we should think of the consequences thereof (Matentji, 2010). Even with the use of "code switches", we are not completely convinced that the correct message is relayed when it is "translated" or explained in Sesotho, since the cultural and language differences cannot be accounted for.

Secondly the PRYM was validated within African culture. However, the validation studies were conducted with at-risk youth from the Cape Town region in the Western Cape (Ungar & Liebenberg, 2005). Questions can therefore be raised regarding the influences that the particular culture of the participants in the QwaQwa and Bethlehem, Free State might have on the way they answered and interpreted the questions. As Ungar (2005:323-444) stated

“we have not yet adequately understood people’s own culturally determined indicators of resilience”. This lack of understanding of the culture may lead to the misinterpretation of answers to some of the questions.

Finally the study is part of an international project. The study hence focuses exclusively on service-use as a factor in the development of resilience. The complex interaction and a more holistic perspective on resilience might therefore not be clear in this study. I will, however attempt to indicate as far as possible how service-use links to other factors that influence resilience.

3.8 Summary

In this Chapter the research context was explained and a conceptual framework was described in order to fully explain the research problems, the data collection instrument and procedures that were followed. Furthermore, ethical issues were examined, validation and reliability were argued and the limitations of this study were analysed.

CHAPTER 4

RESEARCH RESULTS

4.1 Introduction

The main goal of the Pathways to Resilience Research Project has been to understand which pathways that children and youth follow contribute to their ability to do well in life. In this study the intention was to determine the effect that service-use has on the resilience of youth-at risk. The following Service sectors were investigated: School, Social, Mental health, Criminal justice, Health and Cultural or spiritual services, as found in Section C (Youth Services Survey in the PRYM). Furthermore we wanted to identify services which will lead to higher or lower resilience scores (Resilience Research Centre, 2010:1-2).

In this chapter I describe the demographic backgrounds against which the study was conducted. This includes age, race, education level and gender. I also discuss the overall service usage of every service; which includes a summary of the main sectors (school, social, mental health, criminal justice, health and cultural or spiritual services) being investigated, followed by every sub-service.

Data were analysed to establish whether there is a correlation between services use and the participants' resilience score, a way of exploring the possible effect of service-use on resilience of youth who are at risk.

4.2 Reliability of the results

The Cronbach Alpha was used to determine whether the questionnaire or the measuring instrument really measures what it is supposed to, thus internal consistency.

Firstly we focused on the internal consistency of the Youth Services Survey (YSS), (Section C, Questions: 18-57 of PRYM)

Cronbach Alpha	N of Items
.816	6

	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Cronbach Alpha if item deleted
Criminal justice service-use	12.8488	62.766	.533	.799
School service-use	10.9791	54.597	.604	.782
Cultural or spiritual service-use	11.0201	52.675	.532	.805
Social service-use	11.7253	54.065	.683	.764
Mental health service-use	12.1206	54.542	.708	.761
Health service-use	10.2139	59.625	.472	.810

Table 10: Cronbach Alphas of service sectors

Table 10 indicates the Cronbach Alpha score for the 6 different sectors; which represent the service usage of the Youth Service Survey (Section C of the PRYM). The Cronbach Alpha constructs can take on values between 0 and 1; the higher the value the higher the degree of internal consistency or reliability (Gravetter & Forzano, 2009:461; Remler & Van Ryzin, 2011:122). A score of 0.816 was found.

A score of 0.816 is quite high and indicates a high level of internal consistency, which also means that this measures what it is supposed to. Furthermore, when you look at the Cronbach Alpha if deleted none of these deletions would increase the value of Alpha.

The internal consistency, the CRYM, will be discussed next (embedded in the PRYM as part of Section B).

Cronbach Alpha	N of Items
.879	28

	Scale Mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Cronbach Alpha if item deleted
B1 I cooperate with people around me	114.65	251.755	.457	.874
B2 I try to finish what I start	114.56	255.311	.419	.875
B3 People think I am fun to be with	115.01	253.935	.378	.876
B4 I am able to solve problems without hurting myself or others	114.92	253.231	.335	.878
B5 I know my own strengths	114.32	254.621	.492	.873
B6 Spiritual beliefs make me strong	114.53	255.059	.432	.875
B7 I think it is important to serve my community	114.49	257.165	.393	.876
B8 My friends are on my side	115.07	252.808	.392	.876
B9 My friends stand by me during difficult times	115.03	254.316	.360	.877
B22 My caregiver(s) watch me closely	114.64	247.950	.537	.872
B23 My caregiver(s) know a lot about me	114.61	249.446	.550	.872
B24 If I am hungry there is something to eat	114.36	257.896	.378	.876

	Scale Mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Cronbach Alpha if item deleted
B25 I talk to my caregiver(s) about how I feel	114.99	250.166	.447	.874
B26 My caregiver(s) stand(s) by me during difficult times	114.52	247.592	.599	.870
B27I feel safe when I am with my caregiver(s)	114.25	255.241	.502	.873
B28 I enjoy my caregivers' cultural and family traditions	114.43	255.153	.424	.875
B38 Getting an education is important to me	113.94	263.897	.421	.876
B39 I feel I belong at my school	114.14	261.706	.374	.876
B46 I have role models (people to look up to)	114.37	254.893	.442	.874
B47I know how to behave in different social situations	114.24	255.392	.528	.873
B48 I am given opportunities to show others that I am becoming an adult and can act responsibly	114.55	255.470	.440	.875
B49 I know where to go in my community to get help	114.59	253.016	.455	.874

	Scale Mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Cronbach Alpha if item deleted
B50 I have opportunities to develop skills that will be useful later in life	114.47	256.267	.428	.875
B51I am proud of my cultural background	114.24	258.378	.421	.875
B52 I am treated fairly in my community	114.83	251.373	.430	.875
B53 I participate in organized religious activities	114.69	257.352	.325	.878
B54 I enjoy my community's traditions	114.76	254.806	.382	.876
B55 I am proud of my nationality	113.99	263.567	.393	.876

Table 11: Cronbach Alphas of CRYM

Table 11 indicates the Cronbach Alpha score of the CRYM questionnaire, which is embedded in the PRYM. The score of 0.879 is a very high score; one might say that this questionnaire has a high internal consistency.

When looking at the Cronbach Alpha when deleted, none of these deletions would increase the value of the Alpha.

4.3 Demographic information of participants

4.3.1 Gender

As mentioned in Chapter 3, a total of 1209 young people participated in the Pathways to Resilience Research Project. The distribution with regard to gender (see Table 12) was as follows : 644 participants were female and 559 participants were male; thus 53.3% of the population was made up of female participants and 46.2% of male participants. Six participants did not indicate whether they were male or female. Participants who did not answer a question were coded as 97, to indicate Missing Values.

Gender		Frequency	Percent
	Female	644	53.3
	Male	559	46.2
	Total	1203	99.5
Missing	97	6	0.5
Total		1209	100.0

Table 12: Sex of participants

4.3.2 Age

Table 13 shows a detailed description of the age distribution of all the participants that were part of the study. It is clear that the bulk of the participants were between the ages of 14 and 17 years old; 104 participants were 14 years of age (8.6% of population), 184 participants were 15 years of age (15.2% of population), 336 participants were 16 years of age (27.8% of population), and 255 participants were 17 years of age (21.1% of population),

Age		Frequency	Percent
	12	8	0.7
	13	94	7.8
	14	104	8.6
	15	184	15.2
	16	336	27.8
	17	255	21.1
	18	130	10.8
	19	97	8.0
	Total	1208	99.9
Missing	97	1	0.1
Total		1209	100.0

Table 13: Age frequencies of participants

4.3.3 Educational level

The participants have various educational levels (see Table 14). The following educational levels were observed for the different groups (the participants were asked what the highest grade was which they passed). Most of the participants are in or have completed Grades 6 to 9, with a few in Grades 10 to 12, 113 participants in Grade 6 (9.3% of population), 124 participants in Grade 7 (10.3% of population), 246 participants in Grade 8 (20.3% of

population), 554 participants in Grade 9 (45.8% of population), 64 participants in Grade 10 (5.3% of population), 38 participants in Grade 11 (3.1% of population) and 7 participants in Grade 12 (0.6% of population). 10 participants did not indicate the highest Grade that they have passed.

Grade	Frequency	Percent
3	4	0.3
4	14	1.2
5	35	2.9
6	113	9.3
7	124	10.3
8	246	20.3
9	554	45.8
10	64	5.3
11	38	3.1
12	7	0.6
Total	1199	99.2
Missing	97	0.8
Total	1209	100.0

Table 14: Educational level distribution of participants

4.3.4 Race / ethnicity

As mentioned in Chapters 1 and 3, the majority of participants were African , while a small number of the learners that participated in the study were from other ethnical groups. The distribution with regard to ethnicity was as follows (see Table 15) : 1179 Black (97.5% of the population) 12 White (1% of population), 15 Coloured (1.2% of population) and 1 Indian (0.1% of population). Two participants did not indicate their race. Evidently, the majority of the sample included Black participants from the the QwaQwa and Bethlehem areas.

Race/ethnicity		Frequency	Percent
	Black	1179	97.5
	White	12	1.0
	Coloured	15	1.2
	Indian	1	0.1
	Total	1207	99.8
Missing	97	2	0.2
Total		1209	100.0

Table 15: Race of participants

4.4 The correlation between service-use and resilience

As mentioned in Chapter 3, the Spearman's rank order correlation coefficient was used to measure the degree of association between two variables for which ordered data are available (Gravetter & Forzano, 2009:337; Steyn & Swanepoel, 2007:272). It is therefore possible to identify the degree of association between service usage and resilience in the sample.

As previously indicated the PRYM measures services from six different service sectors. Every sector will first be discussed, followed by a discussion of the sub-services that fall under each sector.

		Resilience score
School service-use	Correlation coefficient	-.049
	Sig. (2-tailed)	.089
	N	1202
Cultural or spiritual service-use	Correlation coefficient	-.068*
	Sig. (2-tailed)	.019
	N	1188
Health service-use	Correlation coefficient	.069*
	Sig. (2-tailed)	.016
	N	1207
Social service-use	Correlation coefficient	-.174**
	Sig. (2-tailed)	.000
	N	1204
Mental health service-use	Correlation coefficient	-.162**
	Sig. (2-tailed)	.000
	N	1199
Criminal justice service-use	Correlation coefficient	-.238**

	Sig. (2-tailed)	.000
	N	1196

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 16 : Spearman's rank order correlation coefficient of the different service sectors with resilience

According to Steyn and Swanepoel (2007:282), guidelines to interpret the practical significance of the Spearman's rank order correlation coefficient are as follows: correlations of approximately 0.1 are of small significance, 0.3 of medium significance and 0.5 of large significance. For the purpose of this study we will only discuss correlations of medium or large significance.

Furthermore, Gravetter and Forzano (2009:336) and Steyn and Swanepoel (2007:272) state that when two variables correlate they vary together. Thus you can distinguish between two different correlations, namely:

- Positive correlation (+): this is for instance when one variable increases in value, the other variable will as well.
- Negative correlation (-): when one variable increases in value the other variable will decrease.

Table 16 indicates that mostly negative correlations were observed, indicating a lower resilience level with increased service-use. The following are statistically significant Spearman's rank order correlation coefficient (at the level of 0.01): Social service-use (-0.174), Mental health service-use (-0.162) and Criminal justice service-use (-0.238). However, only the last is of practical significance.

4.4.1 Sub-service: Health services

Health services		Resilience
C18 A nurse	Correlation coefficient	.101**
	Sig. (2-tailed)	.001
	N	1116
C19 Doctor	Correlation coefficient	.081**
	Sig. (2-tailed)	.007
	N	1102
C20 Clinic	Correlation coefficient	.060*

		Sig. (2-tailed)	.045
		N	1128
	C21 Specialist doctor	Correlation coefficient	-.065*
		Sig. (2-tailed)	.033
		N	1062
	C22 Home based care	Correlation coefficient	.019
		Sig. (2-tailed)	.538
		N	1092
	C23 Dentist	Correlation coefficient	.015
		Sig. (2-tailed)	.613
		N	1092
	C24 Emergency services at a hospital or clinic	Correlation coefficient	-.097**
		Sig. (2-tailed)	.001
		N	1125
	C25 Been admitted to hospital	Correlation coefficient	-.044
		Sig. (2-tailed)	.140
		N	1139

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 17 : Spearman's rank order correlation coefficient for Health services with resilience

Table 17 indicates the Spearman's rank order correlation coefficient for every specific service with regard to Health services. The statistically significant correlations (at the level of 0.01) are as follows: A nurse (0.101), doctor (0.081), emergency services at a hospital or clinic (-0.097) It should be noted that the correlation is very small and therefore not practically significant.

4.4.2 Sub-service: School services

School services		Resilience	
	C27 Support educator	Correlation coefficient	.051
		Sig. (2-tailed)	.096
		N	1067
	C28 Occupational therapist	Correlation coefficient	-.102**

		Sig. (2-tailed)	.001
		N	1083
	C29 Extra help from a teacher	Correlation coefficient	-0.0004
		Sig. (2-tailed)	.990
		N	1089
	C30 Special school	Correlation coefficient	-.142**
		Sig. (2-tailed)	.000
		N	1067
	C31 Speech therapist	Correlation coefficient	-.166**
		Sig. (2-tailed)	.000
		N	1074
	C33 Social worker, therapist or psychologist you saw at the school	Correlation coefficient	-.075*
		Sig. (2-tailed)	.013
		N	1092

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

Table 18: Spearman's rank order correlation coefficient for School services with resilience

Table 18 indicates the Spearman's rank order correlation coefficient for every specific service with regard to School services. It should be noted that School services does not imply participants who attend school but the participants who participate in additional activities offered by the school itself. The statistically significant services (at the level of 0.01) were as follows: Occupational therapist (-0.102), special school (-0.142), speech therapist (-0.166).

Evidently only services rendered by occupational therapists, special schools and speech therapists scored significantly; however it is important to note that these services all scored negatively with regard to resilience scores, and are not important in practice.

4.4.3 Sub-service: Social services

Social services		Resilience	
	C34 Social worker	Correlation coefficient	-.082**
		Sig. (2-tailed)	.006
		N	1108
	C35 Foster placement with foster parent	Correlation coefficient	-.159**

	Sig. (2-tailed)	.000
	N	1133
C36 Foster home	Correlation coefficient	-.200**
	Sig. (2-tailed)	.000
	N	1130
C37 Drop-in centre	Correlation coefficient	-.162**
	Sig. (2-tailed)	.000
	N	1136
C38 Home-based care	Correlation coefficient	-.102**
	Sig. (2-tailed)	.001
	N	1104
C39 Intensive family intervention to deal with family or individual problems	Correlation coefficient	-.121**
	Sig. (2-tailed)	.000
	N	1091
C40 Homeless shelter	Correlation coefficient	-.184**
	Sig. (2-tailed)	.000
	N	1119
C41 Special recreation programme or holiday programme	Correlation coefficient	-.076*
	Sig. (2-tailed)	.011
	N	1096

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 19 : Spearman's rank order correlation coefficient for Social services

Table 19 indicates the Spearman's rank order correlation coefficient for every specific service with regard to Social services. The statistically significant services (at the level of 0.01) were as follows: Social worker (-0.082), foster placement (-0.159), foster home (-

0.200), drop-in centre (-0.162), home-based care (-0.102), intensive family intervention to deal with family or individual problems (-0.121) and homeless shelter (-0.184).

According to the data, only social workers, foster placements, foster homes, drop-in centres, home-based care, intensive family intervention to deal with family or individual problems and homeless shelters scored significantly. However, all these services, with the exception of foster homes, scored negatively with regard to resilience scores, and are not important in practice.

4.4.4 Sub-service: Mental health services

Mental health services		Resilience
C42 A counsellor, psychologist or psychiatrist	Correlation coefficient	-.135**
	Sig. (2-tailed)	.000
	N	1087
C43 Group therapy	Correlation coefficient	-.147**
	Sig. (2-tailed)	.000
	N	1086
C44 Substance abuse or addictions services	Correlation coefficient	-.222**
	Sig. (2-tailed)	.000
	N	1137
C45 Support group (e.g. Soul Buddyz, Addaaf, Naledi ya bophelo)	Correlation coefficient	-.026
	Sig. (2-tailed)	.389
	N	1069
C46 Medication	Correlation coefficient	-.131**
	Sig. (2-tailed)	.000
	N	1108
C47 Hospital treatment	Correlation coefficient	-.178**
	Sig. (2-tailed)	.000
	N	1126
C48 A help-line	Correlation coefficient	-.172**
	Sig. (2-tailed)	.000
	N	1102

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

Table 20 : Spearman's rank order correlation coefficient for Mental health services

Table 20 indicates the Spearman's rank order correlation coefficient for every specific service with regard to Mental health services. The statistically significant services (at the level of 0.01) were as follow: A counsellor, psychologist or psychiatrist (-0.135), group

therapy (-0.147), substance abuse or addictions services (-0.222), medication (-0.131), hospital treatment (-0.178) and a help-line (-0.172).

Evidently only a counsellor, psychologist or psychiatrist, group therapy, substance abuse or addiction service, medication, hospital treatment and a helpline scored significantly, however it is important to note that these services all scored negatively with regards to resilience scores, and are not important in practice, with the exception of substance abuse or addiction services.

4.4.5 Sub-service: Criminal justice services

Criminal justice services		Resilience
C49 Gone to court not as a witness (when charged)	Correlation coefficient	-.190**
	Sig. (2-tailed)	.000
	N	1140
C50 Been questioned by police not as a witness	Correlation coefficient	-.203**
	Sig. (2-tailed)	.000
	N	1141
C51 Been put in jail	Correlation coefficient	-.220**
	Sig. (2-tailed)	.000
	N	1163
C52 Been on probation	Correlation coefficient	-.215**
	Sig. (2-tailed)	.000
	N	1148
C53 Had to do community service	Correlation Coefficient	-.139**
	Sig. (2-tailed)	.000
	N	1122

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

Table 21 : Spearman's rank order correlation coefficient for Criminal justice services

Table 21 indicates the Spearman's rank order correlation coefficient for every specific service with regards to Criminal justice services. The statistically significant services (at the level of 0.01) were as follow: Gone to court not as a witness (-0.190), been questioned by the police not as a witness (-0.203), been put in jail (-0.220), been on probation (-0.215) and had to do community service (-0.139).

According to the data only Gone to court not as a witness, been questioned by the police not as a witness, been put in jail, been on probation and had to do community service scored significantly, however it is important to note that these services all scored negatively with

regards to resilience scores, and have a small important in practice, with the exception of Had to do community service that has no importance at all in practice.

4.4.6 Sub-service: Cultural or spiritual services

Cultural or spiritual services		Resilience
C54 Traditional healer	Correlation coefficient	-.085**
	Sig. (2-tailed)	.004
	N	1128
C55 Pastoral or spiritual leader	Correlation coefficient	-.068*
	Sig. (2-tailed)	.024
	N	1114
C56 Religious or cultural leader	Correlation coefficient	-.054
	Sig. (2-tailed)	.070
	N	1111
C57 Community elder	Correlation coefficient	-.078**
	Sig. (2-tailed)	.009
	N	1123

*. Correlation is significant at the 0.05 level (2-tailed).

** . Correlation is significant at the 0.01 level (2-tailed).

Table 22 : Spearman's rank order correlation coefficient for Cultural or spiritual services

Table 22 indicates the Spearman's rank order correlation coefficient for every specific service with regards to Cultural or spiritual services. The statistically significant services (at the level of 0.01) were as follow: Traditional healer (-0.085), and community elder (-0.078). The practically significance of this data will be discussed in par 4.6.

According to the data only traditional healer and community elder service scored significantly. However it is important to note that these services all scored negatively with regards to resilience scores, and have no importance in practice.

4.5 Sub-sampling from study population with regard to resilience

As mentioned in Chapter 3, two groups were used within the population. One of the aims of the study was to explore the relationships between the services used by participants and their resilience scores. The data were therefore divided into two different groups. The first group (Group 1) being those participants who fell in the lower quartile (lowest 25%), and the

second group (Group 2), those who fall in the upper quartile (highest 25%) with regards to their resilience score obtained on the PRYM. This enabled the researcher to compare service-use in relations to higher and lower resilience scores in the population. Table 23 represents the distribution of resilience scores for the sample of the populations used in this study.

Total resilience score			Number of participants	Percentage of population
N	Valid	1209		
	Missing	0		
Minimum		8		
Maximum		100		
Percentiles	25	74.29	309	25.58
	50	85.00	572	47.31
	75	92.14	328	27.12

Table 23 : Distribution of participants according to resilience scores into sub-samples

As indicated above the lower quartile was formed by participants who scored 74.29 or lower with regards to their resilience score, and the upper quartile was represented by participants who scored 92.14 or higher with regards to resilience. In the lower quartile 309 participants and in the upper quartile 328 participants were identified Table 23 illustrates that 25.58% of the entire population had a resilience score of 74.29 or lower and 27.12% of the entire population had a resilience score of 92.14 or higher. According the Resilience Research Centre (2010:2), the higher the resilience score, the more resilient the participant appears to be.

4.6 T-test

T-tests were used to identify whether there is a statistically significant difference between the two groups as mentioned in Chapter 3. Effect sizes are used to measure the strength of a relationship between two variables; in this regard the resilience score and the service sector (Shaughnessy *et al.*, 2009:436; Steyn & Swanepoel, 2007:176). Effect sizes is a standardised difference between the means, which can be interpreted as either small, medium or large, according to the following guidelines (Creswell, 2009:157; Gravetter & Forzano, 2009:456; Steyn & Swanepoel, 2007:174):

- Small effect : 0.2

- Medium effect : 0.5
- Large effect : 0.8

In Table 24, the descriptive statistics for every service sector are indicated: Group 1 (the participants who scored lower than 74.29 on their resilience score) and Group 2 (the participants who scored higher than 92.14 on their resilience score) are discussed here. These two groups enabled us to calculate the effect size of every service sector. This enables us to identify whether these two groups in the sector do in fact differ from each other. This makes it possible to identify the following service sectors and resilience scores as being practically significant. They are; Criminal justice service-use (0.54), Mental health service-use (0.43) and Social service-use (0.43). According to Table 24 there is a practical significance between Group 1 (participants who scored lower than 74.29 on resilience) and Group 2 (participants who scored higher than 92.14 on resilience) in the following service sectors Criminal justice service-use, Mental health service-use and Social service-use. They are all medium effects.

Furthermore, the mean of every group and every service usage indicated that the practically significant differences between respondents with low and high resilience were their use of or involvement with Criminal justice services, Mental health services and Social service. Table 24 indicates that the participants in Group 1 (low resilience) make more use of those particular services than those in Group 2 (high resilience). As mentioned earlier; these differences are of medium practical significance.

School service-use	Low resilience	2.9667	2.09987	.12247	0.10	.000
	High resilience	2.7455	2.20208	.12178		.000
Cultural or spiritual service-use	Low resilience	2.9888	2.48450	.14769	0.14	.202
	High resilience	2.6253	2.63427	.14590		.201
Criminal justice service-use	Low resilience	1.64	2.004	.117	0.54	.082
	High resilience	.55	1.165	.065		.080
Mental health service-use	Low resilience	2.34	2.198	.128	0.43	.000

Social service-use	High resilience	1.39	1.751	.097		.000
	Low resilience	2.55	2.004	.117	0.43	.000
Health service-se	High resilience	1.69	1.928	.107		.000
	Low resilience	3.28	1.933	.112	0.21	.000
	High resilience	3.73	2.088	.115		.000

Table 24: Descriptive statistics and t-test results and effect size of all service usage sectors for low and high resilience groups

4.7 Bivariate relationships

The means of the t-test as well as the effect size (see Table 24) guided the next step of data analysis, namely the investigation of associations between service-use and resilience by crosstabs of individual questions. Crosstabs (cross-tabulation) is a function in SPSS 19.0, where you are able to crosstabulate different variables (services usage and resilience groups). This generated information about bivariate relationships. Crosstabs can also be used to describe relationships between variables (Remler & Van Ryzin, 2011:258).

When selecting services for cross-tabulation it is important to note that we will only use the sub-services that have a Spearman's rank order correlation coefficient of 0.2 or higher with resilience, thus those sub-services that had a medium or higher practical significance (Steyn & Swanepoel, 2007:282).

As seen in Table 24 above, only in three service sectors were differences in high and low resilience participants deemed as practically significant. They were: Criminal justice services, Mental health services and Social services.

Keeping the above in mind, the following service-use sectors were used in crosstabs, based on the results of the Spearman's rank order correlation coefficient (see 4.4):

- The Criminal justice service-use: Questions C49 Gone to court not as a witness (when charged) (-0.190); C 50 been questioned by the police not as a witness (-0.203); C51 been put in jail (-0.220) and C52 been on probation (-0.215).
- The Mental health service-use : Questions C44 Substance abuse or addiction services (-0.222).

- The Social service-use had the following significant correlation: Question C36 Foster home (-0.200); C48 A help-line (-0.172).

A further analysis was done to determine whether the quantity of service-use (thus never used it, once, twice, more than three times, see Addendum A) has an effect on the resilience scores of the participants. Only the data with significant phi-values (this measures associations between variables) will be discussed; thus only the services within the three identified service sectors that scored 0.2 or higher.

4.7.1 Criminal justice services

			Low resilience (Group 1)	High resilience (Group 2)	Total
C49 Gone to court not as a witness (when charged)	Never	Count	182	287	959
		% within C49 Gone to court not as a witness (when charged)	19.0%	29.9%	100.0%
	Once in my life	Count	32	20	93
		% within C49 Gone to court not as a witness (when charged)	34.4%	21.5%	100.0%
	A couple of times	Count	27	7	52
		% within C49 Gone to court not as a witness (when charged)	51.9%	13.5%	100.0%
	Three times or more	Count	19	5	36
		% within C49 Gone to court not as a witness (when charged)	52.8%	13.9%	100.0%
Total		Count	260	319	1140
		% within C49 Gone to court not as a witness (when charged)	22.8%	28.0%	100.0%

		Value	Approx. Sig.
Nominal by nominal	Phi	.229	.000
	Cramer's V	.162	.000
N of Valid cases		1140	

Table 25: Cross-tabulation of the low resilience and high resilience groups for Gone to court

Table 25 indicates that when asked whether they had been to court not as a witness (when charged) only 19% of the participants who answered “never”, fell in Group 1, while 29.9% were in Group 2. Similarly 52.8% of those in Group 1 answered “three times or more”, compared to the 13.9% of Group 2.

The phi-value of 0.229 indicates a value of medium importance in practice.

			Low resilience (Group 1)	High resilience (Group 2)	Total
C50 Been questioned by police not as a witness	Never	Count	173	283	909
		% within C50 Been questioned by police not as a witness	19.0%	31.1%	100.0%
	Once in my life	Count	32	24	128
		% within C50 Been questioned by police not as a witness	25.0%	18.8%	100.0%
	A couple of times	Count	28	7	56
		% within C50 Been questioned by police not as a witness	50.0%	12.5%	100.0%
	Three times or more	Count	23	2	48
		% within C50 Been questioned by police not as a witness	47.9%	4.2%	100.0%
	Total	Count	256	316	1141
		% within C50 Been questioned by police not as a witness	22.4%	27.7%	100.0%

		Value	Approx. Sig.
Nominal by nominal	Phi	.234	.000
	Cramer's V	.166	.000
N of Valid cases		1141	

Table 26: Cross-tabulation of the low resilience and high resilience for Been questioned by the police not as a witness

Table 26 indicates that while only 19% of the participants who answered “never”, fell in Group 1, 29.9% were participants in the Group 2, when asked if they have been questioned by the police (not as a witness). Similarly 52.8% of those in Group 1 answered “three times or more” compared to the 13.9% of Group 2.

The phi-value of 0.229 indicates a value of medium importance in practice.

			Low resilience (Group 1)	High resilience (Group 2)	Total
Been put in jail	Never	Count	204	309	1050
		% within C51 Been put in jail	19.4%	29.4%	100.0%
	Once in my life	Count	30	10	60
		% within C51 Been put in jail	50.0%	16.7%	100.0%
	A couple of times	Count	22	2	32
		% within C51 Been put in jail	68.8%	6.3%	100.0%
	Three times or more	Count	12	3	21
		% within C51 Been put in jail	57.1%	14.3%	100.0%
Total	Count	268	324	1163	
	% within C51 Been put in jail	23.0%	27.9%	100.0%	

		Value	Approx. Sig.
Nominal by nominal	Phi	.269	.000
	Cramer's V	.190	.000
N of Valid cases		1163	

Table 27: Cross-tabulation of the low resilience and high resilience groups for Been put in jail

Table 27 indicates that when asked if they have been put in jail only 19.4% of the participants who answered “never”, fell in Group 1, while 29.4% of the participants were in Group 2, Similarly 57.1% of those in Group 1 answered “three times or more” compared to the 14.3% of Group 2.

The phi-value of 0.269 indicates a value of medium importance in practice.

			Low resilience (Group 1)	High resilience (Group 2)	Total
C52 Been on probation	Never	Count	191	299	995
		% within C52 Been on probation	19.2%	30.1%	100.0%
	Once in my life	Count	35	14	83
		% within C52 Been on probation	42.2%	16.9%	100.0%
	A couple of times	Count	23	2	43
		% within C52 Been on probation	53.5%	4.7%	100.0%
	Three times or more	Count	14	4	27
		% within C52 Been on probation	51.9%	14.8%	100.0%
Total		Count	263	319	1148
		% within C52 Been on probation	22.9%	27.8%	100.0%

		Value	Approx. Sig.
Nominal by nominal	Phi	.239	.000
	Cramer's V	.169	.000
N of Valid cases		1148	

Table 28: Cross-tabulation of the low resilience and high resilience groups for Been on Probation

Table 28 indicates that when participants were asked if they had been on probation, 19.2% of the participants who answered “never”, fell in Group 1, while 30.1% of participants were in Group 2. Similarly 51.9% of those in Group 1 answered “three times or more” compared to the 14.9% of Group 2.

The phi-value of 0.239 indicates a value of medium importance in practice.

4.7.2 Mental health services

			Low resilience (Group 1)	High resilience (Group 2)	Total
C44 Substance abuse or addictions services	Never	Count	171	282	919
		% within C44 Substance abuse or addictions services	18.6%	30.7%	100.0%
	Once in my life	Count	28	17	77
		% within C44 Substance abuse or addictions services	36.4%	22.1%	100.0%
	A couple of times	Count	28	13	70
		% within C44 Substance abuse or addictions services	40.0%	18.6%	100.0%
	Three times or more	Count	38	5	71
		% within C44 Substance abuse or addictions services	53.5%	7.0%	100.0%
	Total	Count	265	317	1137
		% within C44 Substance abuse or addictions services	23.3%	27.9%	100.0%

		Value	Approx. Sig.
Nominal by nominal	Phi	.250	.000
	Cramer's V	.177	.000
N of Valid cases		1137	

Table 29: Cross-tabulation of the low resilience and high resilience groups for Substance abuse and addiction services

Table 29 indicates that when asked if they made use of Substance abuse or addiction services, only 18.6% of the participants who answered “never”, fell in Group 1, while 30.7% were in Group 2. Similarly 53.5% of those who answered “three times or more” were in Group 1 compared to the 7% of Group 2.

The phi-value of 0.250 indicates that this is a value of medium importance in practice.

4.7.3 Social services

			Low resilience (Group 1)	High resilience (Group 2)	Total
C36 Foster home	Never	Count	164	267	856
		% within C36 Foster home	19.2%	31.2%	100.0%
	Once in my life	Count	46	20	104
		% within C36 Foster home	44.2%	19.2%	100.0%
	A couple of times	Count	36	10	89
		% within C36 Foster home	40.4%	11.2%	100.0%
	Three times or more	Count	24	14	81
		% within C36 Foster home	29.6%	17.3%	100.0%
Total			270	311	1130
			23.9%	27.5%	100.0%

		Value	Approx. Sig.
Nominal by nominal	Phi	.229	.000
	Cramer's V	.162	.000
N of Valid cases		1130	

Table 30: Cross-tabulation of the low resilience and high resilience groups for Foster homes

Table 30 indicates that when asked whether a participant lived in a foster home, only 19.2% of the participants who answered “never” were in Group 1 (low resilience), while 31% were in Group 2 (high resilience). Similarly 30% of those in Group 1 answered “three times or more” compared to the 17.3% of Group 2.

The phi-value of 0.229 indicates that this is a value of medium importance in practice.

4.8 Odds

In Section 4.7 it was indicated that the continuous usage of certain services might be associated with a participant’s resilience score. Cross-tabulation in SPSS 19.0 enables us to indicate the odds of a participant being either less likely (all the Spearman's rank order

correlation coefficient were negative) to fall in the high resilience group (Group 2) (Remler & Van Ryzin, 2011:259), when partaking in certain services (see par 4.4 and 4.7). The following tables indicate this:

[1] indicates participants who have used the service (once, twice or three or more times), and [0] participants who have not used this service.

			Low resilience	High resilience	Total	Odd
C 50 Been questioned by the police (not as a witness)	0	Count	173	283	456	1.635838
		% within Been questioned by the police (not as a witness)	37.9%	62.1%	100.0%	
	1	Count	83	33	116	0.39759
		% within Been questioned by the police (not as a witness)	71.6%	28.4%	100.0%	
Total		Count		316	572	4.11
		% within Been questioned by the police (not as a witness)	44.8%	55.2%	100.0%	

Table 31: Odds of the low resilience and high resilience groups for Been questioned by the police (not as a witness)

Table 31 indicates that participants who have been questioned by the police (not as a witness) are 4.11 times less likely to fall in the high resilience group than those who have never been questioned.

			Low resilience	High resilience	Total	Odd
C36 Foster home	0	Count	164	267	431	1.628049
		% within Foster home	38.1%	61.9%	100.0%	
	1	Count	106	44	150	0.415094
		% within Foster home	70.7%	29.3%	100.0%	
Total		Count	270	311	581	3.92
		% within Foster home	46.5%	53.5%	100.0%	

Table 32: Odds of the low resilience and high resilience groups for Foster homes

Table 32 indicated that participants who have lived in a Foster home are 3.92 times less likely to fall in the high resilience group than those who have never lived in a Foster home.

			Low resilience	High resilience	Total	Odds
C49 Gone to court (not as a witness)	0	Count	182	287	469	1.576923
		% within Gone to court (not as a witness)	38.8%	61.2%	100.0%	
	1	Count	78	32	110	0.410256
		% within Gone to court (not as a witness)	70.9%	29.1%	100.0%	
Total		Count	260	319	579	4
		% within Gone to court (not as a witness)	44.9%	55.1%	100.0%	

Table 33: Odds of the low resilience and high resilience groups for Gone to court (not as a witness)

Table 33 indicates that participants who have gone to court (not as a witness) are 4 times less likely to fall in the high resilience group than those who have never been to court (not as a witness).

			Low resilience	High resilience	Total	Odds
C51 Been put in jail	0	Count	204	309	513	1.514706
		% within Put in jail	39.76%	60.23%	100.0%	
	1	Count	64	15	79	0.234375
		% within Put in jail	81.1%	18.9%	100.0%	
Total		Count	268	324	592	6.46
		% within Put in jail	45.27%	54.72%	100.0%	

Table 34: Odds of the low resilience and high resilience groups for Been put in jail

Table 34 indicates that participants who have been put into jail, 6.46 times less likely to fall in the high resilience group than those who have never been put into jail.

			Low resilience	High resilience	Total	Odds
C52 Been on probation	0	Count	191	299	490	1.565445
		% within Been on probation	39.0%	61.0%	100.0%	
	1	Count	72	20	92	0.277778
		% within Been on probation	78.3%	21.7%	100.0%	
Total		Count	263	319	582	5.64
		% within Been on probation	45.2%	54.8%	100.0%	

Table 35: Odds of the low resilience and high resilience groups for Been on probation

Table 35 indicates that participants, who have been on probation, are 5.64 times less likely to fall in the high resilience group than those who have never been on probation.

			.00	1.00	Total	Odds
C44 Substance abuse or addiction services	0	Count	171	282	453	1.649123
		% within Substance abuse or addiction services	37.7%	62.3%	100.0%	
	1	Count	94	35	129	0.37234
		% within Substance abuse or addiction services	72.9%	27.1%	100.0%	
Total		Count	265	317	582	4.43
		% within Substance abuse or addiction services	45.5%	54.5%	100.0%	

Table 36: Odds of the low resilience and high resilience groups for Substance abuse or addiction services

Table 36 indicates that participants who have made use of substance abuse or addiction services are 4.43 times less likely to fall in the high resilience group than those who have never used substance abuse or addiction services.

4.9 Summary

In this chapter the results of the research conducted to explore the correlation between the use of particular service indicated in the PRYM and resilience in a group of at-risk youth in the Eastern Free State, South Africa were reported. The reliability of the results was indicated, based on the Cronbach Alpha scores. An overview of the biographical information of the participants was presented. This was followed by the results indicating the relationship between the services and resilience, where significant scores were found for several of the Criminal justice, Mental health and Social services. Finally, odds were calculated to determine the likelihood of a participant being in the high resilience sample.

In the following chapter the results will be interpreted and discussed.

CHAPTER 5

INTERPRETATION AND DISCUSSION OF FINDINGS

5.1 Introduction

The purpose of this study was to contribute to our understanding of the ways in which the use of services in a particular context contributes to the negotiation of pathways to resilience in a group of youth-at-risk in the South African context. Research conducted on resilience in South African indicate that services are associated with resilience (Ebersöhn, 2010:286,389; Phasha, 2010:1235; Theron *et al.*, 2011:2; Theron & Dunn, 2010:235-241; Theron & Malindi, 2010:726-728; Theron & Theron, 2010:2-6; Ungar *et al.*, 2011:232). Yet the quantitative correlations between these services and resilience of youth at-risk in the South African context were not established in the research (see par 2.4.2.1). The results of this study address this particular gap in the knowledge of resilience of South African youth. The study forms part of the international research conducted on Pathways to Resilience Research Project led by the Resilience Research Centre at Dalhousie University in Canada.

The main aim of this study was to investigate the effect of service-use on the resilience of a group of South African at-risk youth. Considering the purpose and aims the main research question addressed in this study was:

“What is the effect of service-use on the resilience of a group of South African at-risk youth?”

To answer this question, the following is discussed in this chapter:

- The outcomes of the literature study with particular reference to resilience as a multi-dimensional construct
- The risk and protective factors associated with the resilience of South African adolescents who are at-risk due to various adversities
- The results of the empirical study with specific reference to how services correlate to resilience in at-risk youth in South Africa.

5.2 Resilience as a multi-cultural construct

The literature study indicated that resilience movement developed through different stages and was influenced by various researchers throughout the years. (see Cook & Du Toit, 2005:249; Gorman-Smith & Tolan, 2003; Lerner & Benson, 2003; Masten & O'Dougherty Wright, 2010:214; Masten & Obradović, 2006:14; Rutter, 2005; Ungar, 2008:2; Ungar *et al.*, 2008:3,12). A summary of the various stages is given in Table 37 below.

First stage	Second stage	Third stage	Current stage
Resilience was seen as an individual trait, influenced by skills and genetic influences.	Researchers explored what within the child and the child's environment (i.e. family, community, culture) might offer protection against risk.	The focus fell on <i>how</i> mechanisms (risk- and protective factors) buffered the effects of the risks these children faced.	Currently resilience research focuses on individuals' capacity to navigate their way to health resources and their communities' capacity to provide these resources in a culturally relevant way
Some researchers concluded that because of these individual capacities resilient individuals were seen as invulnerable.	Markers of good adaptation as well as potential assets and protective factors associated with resilient children emerged in this stage.	Many models were suggested : Compensatory, Challenge and Protective factor Model	
Researchers tried to identify differences between those who did well and those who did not, in the face of adversity	The limitation of this phase was that it provided a list of protective resources. This list could not explain how resilience came about.	However research has begun to explain that resilience should be perceived/seen as an interaction between the individual and the environment, which also includes a particular culture. They argued that the community as well as social institutions such as schools, clinics and other services have a significant effect on people's resilience.	

First stage	Second stage	Third stage	Current stage
Critique was received, researchers found that resilience implied more than individual personality trait influences			

Table 37: Various stages of development of the resilience movement

The various stages accumulated in the understanding of resilience as a multi-dimensional construct. The implication of such an understanding is that, both the transactional nature and the cultural embeddedness of the construct are acknowledged and have to be considered in research and intervention that intends to facilitate change in a particular context.

Recent South African studies also described resilience as a transaction between youth at-risk and their social-ecological contexts (Malindi & Theron, 2011; Phasha 2010; Theron & Dunn 2010; Theron *et al.*, 2011; Theron & Malindi, 2010; Ungar *et al.*, 2011). However, in more recent research Ungar (2011:3) found that research conducted from an ecological systems theory approach, mainly focussed on resilience within the micro-systems (the family, peers and teachers). However, it seems evident that in the South African context the macro-systems, and in particular community support within a particular cultural context, might play a significant role in negotiating pathways to resilience. This argument is based on the overwhelming references in the South African literature to the support young people; who are at-risk, receive from their extended families. These young people also reported that ancestral worship was promoting their well-being (Department: The Presidency, 2010:13; Theron & Theron, 2010:5).

In terms of the effect of service-use on resilience it seems evident that on the one hand there might be relationships between services and resilience as indicated by research conducted from a qualitative perspective, on the other hand there are indications that young people in the South African contexts strongly rely on their extended families and cultural practices which might influence the effect that service-use has on the resilience of youth at risk in this context.

5.3 Risk and protective factors associated with resilience of South African youth

In this section a brief overview of risks which South African youth are facing will be given. This will be followed by a discussion of the association between international and South African findings in literature regarding protective factors.

5.3.1 The risk factors associated with resilience in South African youth

The four sectors of community life which risk factors manifest are the economic, education, health and judiciary sectors. In Table 38 a brief overview of ways in which these risk factors manifest in the community according to the literature, is presented (see par 2.3.2).

Poverty	Education	Health	Crime and violence
Many South Africans are bought up in high levels of poverty.	The South African education system is still battling with lack of infrastructure, curriculum changes and shortages of institutions for black learners.	Smoking and drinking are some of the bad health behaviours youth are showing in South Africa.	South Africa is seen as one of the most dangerous countries in the world.
It is estimated that more than 40% of South Africans live below the poverty line.	Due to inadequate infrastructure and service delivery, rural schools are at a greater disadvantage.	Youth are becoming more sexually active earlier in their lives.	High percentages of crimes are found in the Western Cape and Gauteng provinces.
It was found that there is a high correlation between poverty and lack of educational attainment.	Social and economic exclusions still form a big part of society, thus the quality of education in black schools still remains poor even after the abolishment of apartheid.	Youth suicide is on the increase due to unattended psychological issues they are facing.	Crime and violence has infiltrated schools (“Johannesburg boy shoots fellow pupils” (SAPA, 2011a), “Stabbed school boy dies” (SAPA, 2011b), “Boy murdered in Mpumalanga school” (SAPS, 2011c).

Poverty	Education	Health	Crime and violence
Poor children tend to suffer more from illness due to the lack of adequate health care services at their disposal	Bullying, fighting with weapons and high levels of vandalism are situations learners face on a day to day basis, which make it difficult for learners who come to school become educated.	8.7% of youth aged between 15-24years are infected with the HI-virus.	Youth aren't only victims but also the perpetrators of crimes.
28.5% of South African households are earning less than R800 per month.	Quality of instruction still remains poor in the majority of South African schools.	Youth in rural areas are associated with low income and poor levels of general health.	In the high level of poverty in South Africa, youth will seek other sources that will provide them with social status and money.

Table 38: A brief overview of risk factors South African youth are facing

When compared to the risk factors in participating countries the scale on which risks are present in South Africa causes concern about the health and wellbeing of young people. What is important to keep in mind is that although resilience needs a context of risk, young people might still adjust well to risk. It is therefore important that all people involved with youth at-risk in all these sectors in which risk has been identified, need to attend more seriously to ways to diminish the risks for these young people who are continually exposed to adversities. Since it will not be possible to eradicate all these risks the development of resilience through the provision of services might counter the effect of the adversities that these young people have to face.

5.3.2 Protective factors associated with resilience in South African youth

Various protective factors that contribute to the resilience of at-risk youth identified in South African literature correlated to a large extent with those found in international research studies. Such correlations are evident with reference to the individual strengths found in resilient youth. These strengths include well-developed cognitive skills, attention and problem-solving skills, effective emotion and behaviour regulation and good self-regulation, positive self-perceptions, goal and/or achievement orientation, empathy, optimism,

temperament and personality, conscientiousness and the ability to self-regulate, and the preference for socially or system-appropriate behaviour (see par 2.4.1).

In terms of family strengths strong similarities were identified with reference to the presence of one or more effective parent(s), socio-economic advantages, a family that has a strong, coherent and consistent set of values, a mother's capacity to bond with her child, supportive family relationships (this includes joint participation), experiences of belonging, being loved, being valued within the family system, opportunities to pursue education and establishment of rules within the family and older siblings offering help and support (see par 2.4.1).

Community factors were also found to be a protective factor with regard to resilient youth. The following factors identified in South African literature were in line with international findings: Quality of services and health care, pro-social friends, a quality neighbourhood (public safety, collective supervision, libraries and recreation centres), community support, with regard to the idea of respect and support of youth's success, a community which provides opportunities for therapy, active support from peers, mobilisation and synergy, peers who accept you for who you are and after school activities at school (see par 2.4.1).

It is important to note that the protective factors which influence resilient youth in South Africa were distinguished from those factors identified in international literature by the continuous references to the broader community, cultural and religious context. Ubuntu, ancestral worship, culture and indigenous African values apparently play a more significant role in the South African youth at-risk's ability to deal with adversities than found internationally. The implication with regard to the relationship between service-use and resilience might be that the alignment of services with community, cultural and religious practices needs to be explored in the development of resilience in South African youth.

5.4 The effect of service-use on the resilience of at-risk youth

The effect of service-use on the resilience of at-risk youth will be discussed with reference to:

- the reliability of the measuring instrument
- the correlations between service-use and resilience scores
- the differences between service-use of high and low resilience groups

5.4.1 Reliability of the measuring instrument

The Cronbach Alpha was used to test the internal reliability of the measuring instrument, in order to establish whether the instrument measures what it is supposed to measure (Cronbach, 1951; Gravetter & Forzano, 2009:461; Maree, 2007:216). Two sections of the PRYM namely Section B; the CRYM (Child Resilience Youth Measure) and secondly Section C, the Youth Services Survey (YSS), were used in this study. A Cronbach Alpha score of 0.816 (see par 4.2) was attained for Section C the Youth Services Survey (YSS); and 0.879 was found for Section B the CRYM (Child Resilience Youth Measure). Both these scores indicate a high level of internal consistency.

Furthermore when looking at the Cronbach Alpha if deleted; this indicates what difference it makes to the overall score when a certain variable is deleted from the calculation. In this instance none of these deletions would increase the value of the alpha. One can therefore argue that this Section has a high internal reliability (Cronbach, 1951; Gravetter & Forzano, 2009:461; Maree, 2007:216).

In view of the above results it can be argued that the measuring instrument (PRYM) Section B and C can be applied to measure the resilience scores and service-usage and provide reliable results with regard to the relationship between service-use and resilience. It is important to take into consideration that the majority of the participants were black learners currently in Grade 9 and 16-17 years of age. The results therefore merely reflect the relationship between service-use and resilience for this particular group. However, if one considers how critical this phase is in the development of these learners, that will either enable or disable individuals from coping in adverse situations (Pienaar *et al.*,2006:394) the reliability of an instrument that provides correlations between service-use and resilience is welcomed.

5.4.2 Correlation of service-use with resilience scores

The use of services within the six service sectors namely School, Cultural or Spiritual, Health, Social, Mental health and Criminal justice service sectors were assessed by applying the PRYM. The statistical significance of the correlations between service-use in these sectors and the resilience score was determined. A further investigation was conducted to determine whether the use of these services correlated with resilience scores. Only the practically significant scores (scores 0.2 and above) were indicated. The results will now be discussed with reference to each of the six sectors.

5.4.2.1 Health services

The Health services sector showed a positive correlation with resilience but was, however not practically significant at a correlation of 0.069. Thus no practically significant assumptions or analysis can be made with regard to the Health service sector. Psaila *et al.*, (2011:39) point out that in Australia, health services strive to increase protective- and reduce risk factor, despite offering well-established services literature states that health services are often conflicting, disjointed and do not sufficiently meet the needs of the community or population. One might have to look into how and what type of service is being offered to youth at-risk to fully understand the results of this service sector.

Moreover as illustrated in Table 17 (see par 4.4.1) none of the services in the Health services sector had a practically significant correlation with resilience. The implication is that although it seems that Health services is used by youth at-risk who have high resilience it cannot be established with certainty from this study that it is the case.

5.4.2.2 Cultural and spiritual services

The Cultural or spiritual service sector, as illustrated Table 22 (see par 4.4.5) had no practically significant correlations, thus no practically significant findings can be interpreted with regard to Cultural or spiritual services. This result is in contrast with the results of the literature study that suggest that Cultural and spiritual services do play a significant role in the South African community. The question that comes to mind is whether the participants in the research context understood the items associated with the cultural and spiritual sector as services or as part of their culture and/or beliefs.

Secondly, Cultural or spiritual services did not correlate significantly; however literature shows that culture and spirituality plays an important part as protective factor in resilient youth (see par 2.4.1). The question is whether the way in which the PRYM assessed these services were comprehensible within a particular culture in other words whether advice from a community elder for example will be seen as a service being offered or as part of the everyday activities of people.

It therefore seems important to note the differences between the Western and African worldviews. According to Meyer *et al.*, (2008:540-546), Western culture tend to focus on individuality, uniqueness and differences between each other, while African culture focus on groupness, sameness and commonality. With regard to values and customs the Western world focuses on competitiveness, individual rights, separateness and independence, whilst

African cultures live in co-operation, collective responsibility and interdependence (Meyer *et al.*, 2008:546).

Based on Meyer *et al.*, (2008:544) we might argue that within African culture, the rituals, values and customs are seen as the coming together of a community or family and their interdependence on each other and not as a service rendered by the community. However, according to Motshekga (2007) it is not possible to generalise these distinctions between cultures as evidence indicate that many African cultures are torn apart by conflict and break-downs of collective responsibility, indicating the danger of stereotyping

5.4.2.3. School services

The School services sector showed no statistically significant correlation. The implication of this result is that the use of services relating to the school sector cannot be used in this study. Table 18 (see par 4.4.2) demonstrate that none of the services in the School services sector had a practically significant correlation with the resilience score, thus no practically significant findings can be interpreted for these services.

Contradicting results were found by South African researchers who reported that schools are instrumental to resilience, in this study it was found that School services did not show a significant correlation with resilience. This might be due to the fact that if South African literature was seen in the light of the teachers aiding learners in the class setting, the PRYM asked the participants about services offered over and above the teaching time (see par 3.5b.2). From a qualitative perspective a relationship between service-use and resilience has been reported in the South African literature. The services that were mainly referenced were those rendered by schools, psychologists, and social workers (see Ebersöhn, 2010:35; Phasha, 2010:1240; Theron & Dunn, 2010; 241; Theron & Malindi, 2010:725). However, as already stated in the introduction (par 5.1) a quantitative correlation between these services and resilience of youth at-risk in the South African context has not been established.

The quantitative data collected in this study (see par 5.4.2) clearly indicate that there are no significant correlation between service-use and resilience in youth who are at-risk. This study The finding contradicts the findings of qualitative studies on the influence of schools as a protective factor with regard to resilience. A possible explanation for the contradiction may be the fact that service in this study referred to services outside normal teaching hours, while the qualitative South Africa studies focused on services relating to teacher / learner interaction during teaching hours.

5.4.2.4. Social services

With reference to the use of Social services sector, Table 19 (see par 4.4.3) shows that the use of *Foster homes* (-0.200) had a negative practically significant correlation with the resilience score. This finding might indicate that youth at-risk who have been placed in foster homes have lower resilience scores than youth at-risk who have not been placed in foster homes.

Aguilar-Vafaie *et al.*, (2011:1), make some valuable statements with regard to this study. She found that children in Foster homes have increased risks for social, psychological and behavioural problems. Furthermore she mentions that adverse care-giving histories with biological risk factors contribute to the psychosocial deficits among youth in foster homes. The deficits include difficulties with intimacy, aggression and negative self-image. This indicates that youth at-risk in foster homes might have negative outcomes and this supports the findings of this study. However it is important to note that the use of these services are not optional, which might suggest that that participants with high levels of resilience will not necessarily make use of these service.

5.4.2.5. Mental health services

In the Mental health services sector as illustrated in Table 20 (see par 4.4.4) *Substance abuse or addiction service* (-0.222) scored negative practically significant correlations with resilience score. The result suggests that the use of services relating to substance abuse or addiction might indicate low resilience in youth who are at-risk.

The Addiction Research Roundup, (Anon, 2009:1) came to the conclusion that high levels of involved parenting might neutralise a youth's genetic risk factor for engaging in risky behaviour, more specifically substance usage. Furthermore they found that youth with low levels of supportive parenting had three times the rate of substance use by the age of 14.

One might argue that low levels of parenting might be the reason that the correlation with substance abuse or addiction services is high (negatively) with resilience.

If one takes the reported increase in drug and alcohol abuse among young people into consideration, the question is whether attention to the development of resilience on multiple levels might be a possible solution to the problem.

5.4.2.6. Criminal justice services

In terms of the Criminal justice services sector indicated in Table 21 (see par 4.4.6) *Gone to court not as a witness (-0.190)*; *been questioned by the police not as a witness (-0.203)*; *been put in jail (-0.220)* and *been on probation (-0.215)* scored negative practically significant correlations with resilience scores. This indicates that the participants who used these services had lower resilience scores than the other participants in the study and that the increased use of these particular services was associated with a decline in the resilience scores. The findings imply that participants with lower resilience scores apparently take part in activities that bring them in contact with these services.

In summary the results for five of the six sectors showed a statistically significant (0.01 level) correlation between the particular service and resilience. The five sectors include Cultural or spiritual services (-0.068), Health services (0.069), Social services (-0.174), Mental health services (-0.164) and Criminal justice services (-0.238). Schools services did not show any statistical significance. Of the services that showed statistical significance only Health Services showed a positive correlation with regard to resilience.

As described above, one might focus on the risk factors these youth are facing at the moment, all the practically significant correlations (scores higher than 0.2) indicate that when negative outcomes are present, it might indicate that these youth have low levels of resilience.

The above-stated results regarding Criminal justice, Mental health and Social services are confirmed by differences found between the low and high resilience groups as indicated by the results of the t-tests and effect sizes in Table 24 (see par 4.6) and crosstabs analysis.

The following services were found as being practically significant with the use of the phi-values: *Foster home (0.229)*; *substance abuse or addiction services (0.250)*; *gone to court not as a witness (0.229)*; *been questioned by the police not as a witness (0.234)*; *been put in jail (0.269)* and *been on probation (0.239)*.

The study found that the low resilience group more frequently used this service when compared with the high resilience group. It can also be said that youths in the higher resilience group do not participate in behaviours or are not in contexts that will require them to use the above- mentioned services, whereas the low resilience group youths do partake in behaviours or are in contexts which require them to use these services.

In Addition (see par 4.7) an analysis of the odds of a participant being in the high resilience group on service usage was done and the following was found:

- *Been questioned by the police (not as a witness)* participants in this study are 4.11 times **less likely** to fall in the high resilience group than those who had never been questioned.
- *Been in a Foster home* are 3.92 times participants in this study are **less likely** to fall in the high resilience group than those who had never lived in a Foster home.
- *Gone to court (not as a witness)* participants in this study are four times **less likely** to fall in the high resilience group than those who have never been to court (not as a witness).
- *Been put into jail* participants in this study are 6.46 times **less likely** to fall in the high resilience group than those who have never been put into jail.
- *Been on probation* participants in this study are 5.64 times **less likely** to fall in the high resilience group than those who have never been on probation.
- *Substance abuse or addiction services* participants in this study are 4.43 times **less likely** to fall in the high resilience group than those who have never used substance abuse or addiction services.

The results regarding the three service sectors seem to imply that youth at-risk who have low resilience tend to participate in activities that lead to the use of these services associated with secondary and tertiary interventions. On the contrary, youth-at risk with high resilience do not seem to need these services despite the adversities that they face.

A study by Leoschut and Burton (2009) on building resilience to crime and violence in young South Africans, identified resilient factors such as non-violent family environment, non-exposure to criminal role-models, substance abstinence, interaction with non-delinquent peers and attitudes intolerant of violence and antisocial behaviour, which lead to decreased criminal behaviour among the young people. Participants in this study who made use of Criminal justice services might not have had resilient factors as mentioned above, thus increasing the likelihood of engaging in criminal behaviour. In addition they mentioned that there is a link between substance abuse, violent and criminal behaviour. Masten *et al.*, (1990) and Besthorn (1999:122) found that different kinds of risk and hazards might lead to negative outcomes. In the presence of multiple risks (see par 2.3.2), negative outcomes are more likely. Furthermore risks are usually contextually bound and generally result in negative outcomes (Masten & Reed, 2005:77).

5.5 Summary

In this chapter we discussed the fact that the literature study (see par 2) indicated that protective factors found in South Africa and internationally don't differ much from each other. However, cultural and community factors (see par 5.3.2) show that they might play a more prominent role in South Africa. On the other hand several different risk factors were found due to the unique context of South Africa.

Statistical analysis was done and identified various services which were practically significant and that various services were consistent throughout the analysis. It seems that the participants' behaviours or the context they find themselves in influenced their service usage. In addition it seems that participants in this study who participate in *Foster homes; substance abuse or addiction service; gone to court not as a witness; been questioned by the police not as a witness; been put in jail* have lower resilience scores than the participants who did not participate in these services, even though they are all at-risk.

On the other hand it seems that participants in this study, who fall in the high resilience group, might not use these services because they might not show behaviour or find themselves in contexts that will push them to use them. Using the finding and discussion in this chapter, the chapter which follows will address the conclusion and limitations to this study.

CHAPTER 6

CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

6.1 Introduction

The Pathways to Resilience Research Project unfolded a new understanding of the role that services play in the resilience of youth who are at-risk by shifting the focus to the ways in which young people who are at-risk negotiate their pathways to resilience through resources in the community. However, as indicated very limited quantitative research on the relationship between resilience and service-use has been conducted globally. In this study which formed part of the Pathways to Resilience Research Project, in South Africa this relationship between service-use and resilience was explored. The conclusions, recommendation and limitations of the study will be discussed in this chapter.

6.2 Conclusions

6.2.1 Resilience as a process

Resilience as a construct has developed over a period of more or less 30 years from a trait-focused construct to a risk-focused construct and eventually to a cultural-community focused construct as illustrated in Figure 6.1. The shift from the trait and factor-focus to how individuals negotiate their way through resources in a culturally relevant way, apparently suggest that resilience should be perceived as an ongoing process whereby a young person who is at-risk can negotiate pathways to survive the challenges that they have to deal with in their communities.

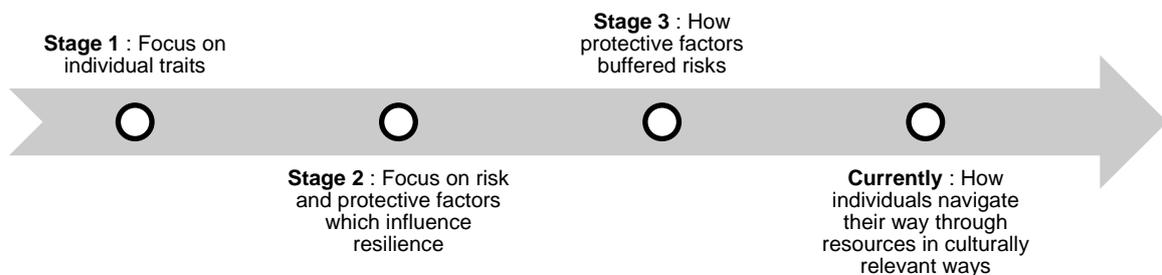


Figure 6: Progression of resilience research

Resilience is therefore described as a dynamic, bi-directional process that depends on young people and their ecologies (see par 2). According to Theron (2011b:1) this transactional-ecological understanding of resilience has direct implications for the conceptualisation of supporting young people who are at-risk in the South African context.

6.2.2 Resilience and service-use in South Africa

In view of the multiple risks that young people face within the South African context, such as poverty, inefficient infrastructure in education support services, increased mental health problems and extreme exposure to violence it is concluded that the facilitation of resilience as a process whereby young people can negotiate pathways in culturally relevant ways has become imperative.

One of the ways for youth at-risk to negotiate such pathways is the use of services that are made available in their communities. In the particular community where the research was conducted the various services indicated in the PRYM (see par 1.5.2.4) are available on an ongoing basis. Yet based on the findings of this study the following conclusions regarding the effect of the service-use on the resilience in this particular community are drawn:

Firstly, young people in a rural South African community do not necessarily use services identified in the PRYM as pathways to negotiate resilience. This was indicated by the absence of a statistically significant correlation between service-use and the high resilience group. However it was evident in qualitative studies conducted in the South African context that services such as health promoting and safe schools, psychologists, social workers do have a significant impact on the resilience of young people.

Secondly young people with low resilience are apparently obliged to use services due to their involvement in certain activities that get them into trouble or being witnesses to such activities. This is indicated by the statistically significant positive correlations between Mental health service sector with reference to Substance abuse and addiction services. A further indication is the strong relationship between low resilience and Criminal justice service sector, indicating that young people who used these services were either involved in criminal activities or had witnessed such activities.

Theron (2011b:11) found that participants had learnt to make positive meaning to their negative contexts; these were mostly facilitated by the attachments they had to grandparents, older siblings and/or God. One can argue that the participants in this study who made use of certain services might not have had positive attachments, thus resulting in negative outcomes.

Thirdly, it was evident that young people who are placed in foster homes due to the fact that their parents and extended families can no longer take care of them have low resilience, as confirmed by the statistical significance between resilience and placement in foster homes through Social services. However it is important to note that young people do not choose these services. The low resilience might therefore rather be ascribed to the lack of agency that these young people experience when placed in foster care. Finally, it is concluded that the limited use of services by young people at-risk who have high resilience might confirm the research findings that suggest that resilient youth make positive meaning of life events and circumstances (see par 5.2).

The conclusions do not imply that young people in a rural South African community do not use any services. The findings rather suggest that service-use might not necessarily negotiate pathways to resilience in an African context, since it was evident that participants with high resilience do not necessarily use services identified in this study. It will 'therefore be important to further explore whether these participants relied more readily on community and cultural resources to negotiate pathways to resilience.

Service–use might however have an effect for youth at-risk who have lower resilience. As indicated in this study these young people are forced to make use of services. Due to the limited scope of this study it was however not possible to further explore the effect of the services they used on the resilience.

Another question that remains is whether the services identified by the PRYM were necessarily interpreted as such from an African perspective. In this regard Theron (2011b:9) argues that there is still a gap regarding our understanding of the way in which cultural context nuance resilience processes.

6.3 Recommendations

The recommendations made based on the results of the study include the following:

6.3.1 The standardisation and revision of the PRYM

The PRYM has not been standardised for application in African contexts (as stated in par 6.3) I therefore recommend that the PRYM should be revised to provide a more culturally and language (mother tongue) appropriate instrument for the assessment of resilience. Furthermore the YSS (Youth Services Survey) should be revised to reflect the relevant

culture; in the case of what is seen as a service in various cultures as mentioned in par 5.4.2.2.

6.3.2 The exploration of services within communities

Secondly, more research is needed on the development of resilience in South African youth at-risk with regard to community, culture and religious practices, to fully understand the effects of this context. Moreover research must be done to understand what is meant with service being rendered or delivered in the African context as mentioned in par 5.4.2.2.

6.3.3 A qualitative follow-up research project

The study should be followed by a qualitative study which will allow us to fully understand and interpret the results found in this study. A qualitative study will also enable us to understand what the participant's views are on services and if they do impact on their level of resilience.

6.4 Limitations

The population selected for this study was Sesotho speaking adolescents between the ages of 12 and 19 years of age in a rural community (QwaQwa and Bethlehem) within South Africa. The following limitations to the research process are therefore acknowledged.

Firstly as stated in par 3.8, the PRYM was not translated to Sesotho; instead code switches were used to describe specific words to the participants. It is, however, accepted that even though code switches were used the translation might have misinterpreted particular cultural connotations or context of the language and therefore influenced the reliability of the instrument.

Secondly, the PRYM was not standardised for use in African culture, which might have influenced the understanding of the term services. As indicated in par 5.4.2.2 cultural services for example might not be seen by the African culture as a service, but as an integral part of community life and relationships between people.

6.5 Final Conclusion

Ungar (2005:323-444), emphasises the limited knowledge about the way in which service ecologies relate to adolescents' capability to do well in adverse situations. The intention of this study was to contribute to a more sufficient understanding of people's own culturally-determined indicators of resilience. It is concluded that the use of services does not necessarily correlates with the use of services in a rural African context. However due to the limited scope of the study further exploration of the context through more in-depth research is needed to establish culturally determined indicators of resilience of young people who are at risk.

The study support Theron (2011b:21)'s argument that resilience needs to be understood as a culturally congruent collaboration between young people and their ecologies. The implication of this position is that families, peer networks, school communities, neighbourhoods, religious circles, NGOs and other systems will have to take co-responsibility for developing culturally appropriate services to support youth who are at risk.

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ADDENDUM A

Pathways to Resilience Youth Measure (PRYM)

PATHWAYS TO RESILIENCE YOUTH MEASURE

For Office Use Only

Participant ID:

Country ID: South Africa
Site ID: Bethlehem / QwaQwa
Referral Agency:
Department ID:
Date of Administration:

Administration:

Thank you for participating in the Pathways to Resilience Research Project. Please answer the following questions as honestly as you are comfortable with. There are no wrong answers.

We want to learn about the sorts of help that works best for young people and about the types of services they use. Before answering the attached questionnaire, please can you tell us if you are **currently** or have used **during the last 6 months**, any of the following?

- [1] Community-based service provider (e.g. Boitelo Youth Network, Hlokomela wa Heno, Tshwaranang, Tswelopele, etc.)

- [2] Correctional Services / Justice (e.g. been questioned by the police, been on probation, had to do community service, victim-offender mediation, correctional supervision, restorative justice, family time order, compulsory schools attendance; after-care services; reporting orders, etc.)

- [3] Educational Support (e.g. Life Skills Training, Career Guidance, Counselling, Social Worker from Education Department, Psychologist from Education Department, Learning Support Facilitator, etc.)

- [4] Child, Youth and Family Services (Social services) (e.g. Social worker from social Development, Foster placement, Drop-in-centre, Shelter, Children's Home, etc.)

- [5] Mental Health (e.g. Counsellor, Psychologist or Psychiatrist, Drug Addiction Program, etc.)

- [] None of the above

SECTION A:

1. How old are you now? _____

2. What is your gender? Female [1] Male [2]

3. People often identify themselves with a particular racial group. To which of the following groups do you belong? (Mark or check the one that best describes you).

[1] Black

[2] White

[3] Coloured

[4] Indian

[5] Other (please specify): _____

4. What is your ethnicity? (For example, Tswana, Zulu, Sotho, Xhosa, Afrikaans, English, etc.) Please list as many groups as you want to.

5. Are you in school?

[1] Yes

[2] No

What was the last grade you passed? _____

F6. Who are you living with now?

[1] Biological parents (both)

[2] Single biological parent (mother)

[3] Single biological parent (father)

[4] Guardian specify _____

[5] Foster parent specify _____

[6] Shelter

[7] Children's home

[8] I live on my own

[9] Child headed family

[10] Other (please describe) _____

7. If you said you were living with one or more parents for Question 6, is one or more of these people your birth parents?

[1] Yes

[0] No

[99] Not applicable

8a. How many brothers and sisters (including step-siblings and half-siblings) do you know of? _____

8b. How many brothers and sisters do you live with? _____

9. What language(s) do you speak at home? (Please list in order of importance)

10. Are you currently in a relationship, or dating someone, or having an affair?

[1] Yes

[0] No

11. Do you have a child?

[1] Yes (Go to question 12)

[0] No (Go to question13)

12. Are you caring for your child at the moment?

[1] Yes

[0] No

[99] Not applicable

13. How many bedrooms are in your house? _____

14. How many people (including yourself) normally sleep at this house?

Number of adults _____

Number of children/youth _____

15. How many meals do you eat per day? _____

SECTION B:

How much do the sentences below DESCRIBE YOU? Circle your answer.

	Does NOT describe me at All	Describes me a little	Describes me somewhat	Describes quite a bit	Describes me A LOT
1. I cooperate with people around me	Not at all	A little	Somewhat	Quite a bit	A lot
2. I try to finish what I start	Not at all	A little	Somewhat	Quite a bit	A lot
3. People think that I am fun to be with	Not at all	A little	Somewhat	Quite a bit	A lot
4. I am able to solve problems without hurting myself or others (for example without using drugs and/or without being aggressive)	Not at all	A little	Somewhat	Quite a bit	A lot
5. I know my own strengths	Not at all	A little	Somewhat	Quite a bit	A lot
6. Spiritual beliefs make me strong	Not at all	A little	Somewhat	Quite a bit	A lot
7. I think it is important to serve my community	Not at all	A little	Somewhat	Quite a bit	A lot
8. My friends are on my side	Not at all	A little	Somewhat	Quite a bit	A lot
9. My friends stand by me during difficult times	Not at all	A little	Somewhat	Quite a bit	A lot

To what extent do the sentences below DESCRIBE YOU?

10. I try to be kind to other people.	Not true	Somewhat true	Certainly true
11. I usually share things with others, for example clothes, food etc.	Not true	Somewhat true	Certainly true
12. I help when someone is hurt, upset or sick	Not true	Somewhat true	Certainly true
13. I am kind to people younger than me	Not true	Somewhat true	Certainly true
14. I often offer help to others (parents, teachers, peers etc.)	Not true	Somewhat true	Certainly true
15. I have one or more good friends	Not true	Somewhat true	Certainly true
16. Many other people my age like me	Not true	Somewhat true	Certainly true

How many of your CLOSE FRIENDS do the following activities?

17. Smoke cigarettes	None	A Few	Most	All
18. Drink alcohol	None	A Few	Most	All
19. Do drugs	None	A Few	Most	All

20. Are sexually involved	None	A Few	Most	All
21. Break the law (other than by using illegal drugs)	None	A Few	Most	All

To what extent do the sentences below DESCRIBE YOUR SITUATION? When we say “caregiver(s)” we mean the person or people who look after you the most.

22. My caregiver(s) watch me closely	Not at all	A little	Somewhat	Quite a bit	A lot	Not applicable
23. My caregiver(s) know a lot about me	Not at all	A little	Somewhat	Quite a bit	A lot	Not applicable
24. If I am hungry, there is something to eat	Not at all	A little	Somewhat	Quite a bit	A lot	Not applicable
25. I talk to my caregiver(s) about how I feel	Not at all	A little	Somewhat	Quite a bit	A lot	Not applicable
26. My caregiver(s) stand(s) by me during difficult times	Not at all	A little	Somewhat	Quite a bit	A lot	Not applicable
27. I feel safe when I am with my caregiver(s)	Not at all	A little	Somewhat	Quite a bit	A lot	Not applicable
28. I enjoy my caregiver’s cultural and family traditions	Not at all	A little	Somewhat	Quite a bit	A lot	Not applicable

To what extent do the sentences below DESCRIBE YOUR SITUATION?

29. I would rather be alone than with people of my own age	Not true	Somewhat true	Certainly true
30. Other people pick on me or bully me	Not true	Somewhat true	Certainly true
31. I get along better with adults than with people my own age	Not true	Somewhat true	Certainly true

How many days a week is your parent/guardian/caregiver at home when you do the following things?

32. When you wake up in the morning?	No days	1 Day	2 Days	3 Days	4 Days	5 Days or more	Not applicable
33. When you come home from school or work?	No days	1 Day	2 Days	3 Days	4 Days	5 Days or more	Not applicable
34. When you go to bed at night?	No days	1 Day	2 Days	3 Days	4 Days	5 Days or more	Not applicable

35. Think of the person that is most like a mother and most like a father to you, that you spend a lot of time with. Who are these people? Please mark ONLY one “X” in each column.		
	A. My mother figure is my . . .	B. My father figure is my . . .
Biological mother/father	1	1
Adoptive mother/father	2	2
Stepparent, girlfriend/boyfriend or partner of legal guardian	3	3

Foster mother/father	4	4
Grandparent, aunt/uncle, or other relative	5	5
Another person (please specify)	6	6
Nobody	7	7

36. Thinking of the mother and father figures you identified in Question 35, how much affection do you receive from each of these people? Please mark one "X" in each column.

	A. Mother figure	B. Father figure
A great deal	3	3
Some	2	2
Very little	1	1
None at all	0	0
Not applicable	99	99

37. Overall, how would you describe your relationship with the mother and father figures you identified above? Please mark one "X" in each column.

	A. Mother figure	B. Father figure
Very close	3	3
Somewhat close	2	2
Not very close	1	1
Not applicable	99	99

To what extent do the sentences below describe your situation at school?

38. Getting an education is important to me	Not at all	A little bit	Some what	Quite a bit	A lot
39. I feel I belong at my school	Not at all	A little bit	Some what	Quite a bit	A lot
40. Teachers at my school who see learners hurting each other will do something to stop them	Not at all	A little bit	Some what	Quite a bit	A lot

41. How far do you hope to go with your education? (Choose only one) I hope to complete ...

[1] Grade 9

[2] High school

[3] Further Education and training (FET)/College

[4] University

[5] Masters/doctoral degree

[0] I don't know

[6] Other _____

42. During the last 12 months (or the last full school year you attended), how many times did you bunk A DAY of school without permission?

- [0] Never
- [1] Once
- [2] A few times a year
- [3] Once a month
- [4] A couple of times a month
- [5] Once a week
- [6] A few times a week
- [7] Everyday

43. During the last 12 months (or during the last full school year you attended), how many times did you get SUSPENDED?

- [0] Never
- [1] Once
- [2] Once, for lack of attendance
- [3] A few times a year
- [4] Once a month
- [5] A couple of times a month
- [6] Once a week

44. Were you ever EXPELLED from school?

- [1] Yes
- [0] No

45. Have you ever FAILED a grade or had to repeat a year?

- [1] Yes
- [0] No

To what extent do the sentences below describe you?

46. I have role models (people I look up to)	Not at all	A little bit	Some what	Quite a bit	A lot
47. I know how to behave in different social situations (e.g. with my friends/ at church)	Not at all	A little bit	Some what	Quite a bit	A lot
48. I am given opportunities to show others that I am becoming an adult and can act responsibly	Not at all	A little bit	Some what	Quite a bit	A lot
49. I know where to go in my community to get help	Not at all	A little bit	Some what	Quite a bit	A lot
50. I have opportunities to develop skills that will be useful later in life (like job skills and skills to care for others)	Not at all	A little bit	Some what	Quite a bit	A lot

51. I am proud of my cultural background	Not at all	A little bit	Some what	Quite a bit	A lot
52. I am treated fairly in my community	Not at all	A little bit	Some what	Quite a bit	A lot
53. I participate in organized activities (e.g. church, mosque, bible study)	Not at all	A little bit	Some what	Quite a bit	A lot
54. I enjoy my community's traditions	Not at all	A little bit	Some what	Quite a bit	A lot
55. I am proud of my nationality	Not at all	A little bit	Some what	Quite a bit	A lot

SECTION C:

Thinking about the services you and your family have received from _____, please indicate the extent to which the following sentences describe your experience with this service.

1. Overall, I am satisfied with the service I received	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
2. I helped choose this service	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
3. The people helping me stood by me	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
4. I felt I had someone within the service to talk to when I was in trouble	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
5. I had a say over how this service was delivered to me, and could ask for what I wanted	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
6. I received the service that was right for me	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
7. I could get the service when I needed it	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
8. The location of the service was convenient, and easy to get to	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
9. Staff respected my religious and spiritual beliefs	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
10. Staff spoke in a way that I understood	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
11. Staff were sensitive to my cultural background and personal values	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
12. I am now better able to cope when things go wrong	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
13. This was the service I needed	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
14. There was a service I needed, but couldn't get	Strongly disagree	Disagree	Undecided	Agree	Strongly agree

15. What has been most helpful about this service?

16. What has been least helpful about this service?

17. Overall, how would you rate this service?

[3] Very helpful

[2] Somewhat helpful

[1] Not helpful at all

Please tick all of the services you have had during your entire life. How often did you use each service?

	How often have you used each of these services?	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
Health Services	18. A nurse	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	19. Doctor	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	20. Clinic	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	21. Specialist doctor (a doctor you were sent to by your family doctor. E.g. for skin problems, allergies.)	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	22. Home based care	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	23. Dentist	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	24. Emergency services at a hospital	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	25. Been admitted to hospital	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
Educational Services	27. Support educator	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	28. Occupational therapist	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	29. Extra help from a teacher	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	30. Special school	Never	Once in	A couple	3 times	Needed, but could not get

		needed it	my life	of times	or more	it
	31. Speech therapist	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	33. Social worker, therapist or psychologist you saw at the school	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
Social Services	34. Social worker	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	35. Foster placement with foster parent	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	36. Foster home	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	37. Drop - in centre	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	38. Home based care	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	39. Intensive family intervention to deal with family or individual problems	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	40. Homeless shelter	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	41. Special recreation program or holiday program	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
Mental Health Services	42. A counsellor, psychologist or psychiatrist	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	43. Group therapy	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	44. Substance abuse or addictions services	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	45. Support group (e.g. Soul Buddyz, Addaaf, Naledi ya bophelo)	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	46. Medication (prescribed for depression, anxiety, ADHD, etc)	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	47. Hospital treatment for things like anorexia, anxiety, depression or another mental health problem	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	48. A help-line (like Kid's Help Phone)	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
Criminal Justice Services	49. Gone to court not as a witness (when charged)	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	50. Been questioned by police not as a	Never	Once in	A couple	3 times	Needed, but

	witness	needed it	my life	of times	or more	could not get it
	51. Been put in jail	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	52. Been on probation	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	53. Had to do community service	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
Cultural or Spiritual Services	54. Traditional healer	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	55. Pastoral or spiritual counsellor	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	56. Religious or cultural leader	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it
	57. Community elder	Never needed it	Once in my life	A couple of times	3 times or more	Needed, but could not get it

Are there other services you have used? Please list them below, then circle how often you have used them.	Once in my life	A couple of times	Three times or more
58.	Once in my life	A couple of times	Three times or more
59.	Once in my life	A couple of times	Three times or more
60.	Once in my life	A couple of times	Three times or more

61. Please think of a service/program/youth group you have had a lot of contact with recently. If you ticked a service on the front page, you might want to think of that one. What was it?

This service was:

- [3] Very helpful
- [2] Somewhat helpful
- [1] Not helpful at all

Thinking about this service (see Question 61), please indicate to what extent the following sentences describe your experience with this service.

62. Overall, I am satisfied with the service I received	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
63. I helped choose this services	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
64. The people helping me stood by me	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
65. I felt I had someone within the service to talk to when I was in trouble	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
66. I had a say over how this service was delivered to me, and could ask for what I wanted	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
67. I received the service that was right for me	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
68. I could get the service when I needed it	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
69. The location of the service was convenient, and easy to get to	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
70. Staff respected my religious and spiritual beliefs	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
71. Staff spoke in a way that I understood	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
72. Staff were sensitive to my cultural background and personal values	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
73. I am now better able to cope when things go wrong	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
74. This was the service I needed	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
75. There was a service I needed, but couldn't get	Strongly disagree	Disagree	Undecided	Agree	Strongly agree

76. What has been most helpful about this service?

77. What could have made this service better?

SECTION D:

To what extent do the sentences below describe your neighbourhood? Circle one answer for each question.

1. People in my community can be trusted	Not at all	A little	Quite a bit	A lot	Don't know
2. People in my community get along with each other	Not at all	A little	Quite a bit	A lot	Don't know
3. There is litter, broken glass or rubbish around my community	Not at all	A little	Quite a bit	A lot	Don't know

4. If a group of youth in your community was bunking school, how likely is it that your neighbours would do something about it?

[3] Very likely

[2] Likely

[1] Unlikely

[0] Very unlikely

[98] Unsure

5. If a child or young person was being abused by his or her family, how likely is it that your neighbours would report it?

[3] Very likely

[2] Likely

[1] Unlikely

[0] Very unlikely

[98] Unsure

6. How safe do you consider your community to be?

[2] Very safe

[1] Somewhat safe

[0] Not safe at all

7. How would you describe your school (or the last school you attended)? Would you say: My school is/was a bad place to be (I don't want to be there) or My school is/was a good place to be (I want to be there)? Circle one answer:

Strongly disagree	Disagree	Undecided	Agree	Strongly agree
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SECTION E:

How often have you felt like this during the past WEEK? Please circle the answer that describes YOU.

1. I had times that I cried	Rarely/ none of the time (less than 1 day)	Some of the time (1 to 2 days)	Often (3 to 4 days)	Most of the time (5 to 7 days)
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2. I felt depressed	Rarely/ none of the time (less than 1 day)	Some of the time (1 to 2 days)	Often (3 to 4 days)	Most of the time (5 to 7 days)
3. I was happy	Rarely/ none of the time (less than 1 day)	Some of the time (1 to 2 days)	Often (3 to 4 days)	Most of the time (5 to 7 days)
4. I felt that I could not stop feeling sad even with help from my family or friends	Rarely/ none of the time (less than 1 day)	Some of the time (1 to 2 days)	Often (3 to 4 days)	Most of the time (5 to 7 days)
5. I felt hopeful about the future	Rarely/ none of the time (less than 1 day)	Some of the time (1 to 2 days)	Often (3 to 4 days)	Most of the time (5 to 7 days)
6. I enjoyed life	Rarely/ none of the time (less than 1 day)	Some of the time (1 to 2 days)	Often (3 to 4 days)	Most of the time (5 to 7 days)
7. I had trouble keeping my mind on what I was doing	Rarely/ none of the time (less than 1 day)	Some of the time (1 to 2 days)	Often (3 to 4 days)	Most of the time (5 to 7 days)
8. I did not feel like eating; my appetite was poor	Rarely/ none of the time (less than 1 day)	Some of the time (1 to 2 days)	Often (3 to 4 days)	Most of the time (5 to 7 days)
9. My sleep was restless	Rarely/ none of the time (less than 1 day)	Some of the time (1 to 2 days)	Often (3 to 4 days)	Most of the time (5 to 7 days)
10. I felt like I was too tired to do things	Rarely/ none of the time (less than 1 day)	Some of the time (1 to 2 days)	Often (3 to 4 days)	Most of the time (5 to 7 days)
11. I felt that people disliked me	Rarely/ none of the time (less than 1 day)	Some of the time (1 to 2 days)	Often (3 to 4 days)	Most of the time (5 to 7 days)
12. I felt lonely	Rarely/ none of the time (less than 1 day)	Some of the time (1 to 2 days)	Often (3 to 4 days)	Most of the time (5 to 7 days)

How many times in the past year have you done the following things?

13. Stolen something from a shop	Never	1 Time	2 Times	3-4 Times	5 Or More Times
14. Got into trouble with the police	Never	1 Time	2 Times	3-4 Times	5 Or More Times
15. Hit or beat up someone	Never	1 Time	2 Times	3-4 Times	5 Or More Times
16. Damaged property (such as breaking windows, scratching a car, putting paint on walls, etc.)	Never	1 Time	2 Times	3-4 Times	5 Or More Times
17. Carried a weapon (such as a gun, knife, traditional	Never	1 Time	2 Times	3-4 Times	5 Or More

weapon, etc.)					Times
---------------	--	--	--	--	-------

How many times in the past year have you done the following things?

18. Smoked cigarettes	Never	Once or twice	Occasionally	Regularly
19. Used chewing tobacco or snuff	Never	Once or twice	Occasionally	Regularly
20. Drank beer, wine, alcoholic drinks	Never	Once or twice	Occasionally	Regularly
21. Sniffed glues, sprays or petrol	Never	Once or twice	Occasionally	Regularly
22. Used dagga	Never	Once or twice	Occasionally	Regularly
23. Used any other drug, such as ecstasy, speed, heroin, crack or cocaine, mandrax, etc.	Never	Once or twice	Occasionally	Regularly
24. Taken steroids without a doctor's prescription	Never	Once or twice	Occasionally	Regularly
25. Had willing sexual intercourse	Never	Once or twice	Occasionally	Regularly
26. Had unprotected sexual intercourse	Never	Once or twice	Occasionally	Regularly

To what extent do the sentences below DESCRIBE YOU?

27. I lose my temper	False	Sometimes	True
28. I do as I am told	False	Sometimes	True
29. I fight a lot	False	Sometimes	True
30. I am accused of lying or cheating	False	Sometimes	True
31. I take things that are not mine from home, school, or elsewhere	False	Sometimes	True
32. I pick on or bully others (using sms, notes, physically or emotionally)	False	Sometimes	True

33. In the past year, what things have you experienced that have improved your life? For each experience, how big an influence did it have on your life? (For example, getting a job, moving, passing my grade, travelling somewhere special, forming a special relationship with someone, etc.)

Experience that improved my life

Effect

a. _____

b. _____

c. _____

Not at all	A little	Somewhat	Quite a bit	A lot
Not at all	A little	Somewhat	Quite a bit	A lot
Not at all	A little	Somewhat	Quite a bit	A lot

34. In the past year, what events have you experienced that caused you difficulties? For each event, how big an influence did it have on your life? (For example, trouble at school, being fired, getting into trouble with the law, somebody in my family being HIV positive/ loss of a family member, etc.)

Experience that made life difficult

Effect

a. _____

b. _____

c. _____

Not at all	A little	Somewhat	Quite a bit	A lot
Not at all	A little	Somewhat	Quite a bit	A lot
Not at all	A little	Somewhat	Quite a bit	A lot

SECTION F:

1. What **COMMUNITY** programs or activities that are not school related, do you participate in? For example, Boys and Girls Club, a theatre group, music, sports such as soccer, netball, youth clubs, or cultural, family or traditional activities.

Community programs or activities **How often do you do each of these?**

a. _____ A few times a year Once a month a A couple of times a month Once a week a A few times a week Everyday

b. _____ A few times a year Once a month a A couple of times a month Once a week a A few times a week Everyday

c. _____ A few times a year Once a month a A couple of times a month Once a week a A few times a week Everyday

2. What **SCHOOL** activities do you participate in now (sport teams, learner representative council, drama, music, etc.) that are organized by staff or learners at your school? If you are out of school, what activities did you do the last year you were in school?

School activities **How often do you do each of these?**

a. _____ A few times a year Once a month A couple of times a month Once a week A few times a week Everyday

b. _____ A few times a year Once a month A couple of times a month Once a week A few times a week Everyday

c. _____ A few times a year Once a month A couple of times a month Once a week A few times a week Everyday

How often do you do each of these activities?

3. Volunteer (help others without pay) your time?	Never	A Few Times A Year	Once A Month	A Couple Of Times A Month	Once A Week	A Few Times A Week	Everyday
4. Do paid work?	Never	A Few Times A Year	Once A Month	A Couple Of Times A Month	Once A Week	A Few Times A Week	Everyday
5. Go out with your friends?	Never	A Few Times A Year	Once A Month	A Couple Of Times A Month	Once A Week	A Few Times A Week	Everyday
6. Been a leader in a group or organization?	Never	A Few Times A Year	Once A Month	A Couple Of Times A Month	Once A Week	A Few Times A Week	Everyday

How often in the past year have the following reasons stopped you from participating in community or school activities/ attending school?

7. Not having enough money	Not at all	A little	Quite a bit	A lot	Don't know
8. Not having transportation	Not at all	A little	Quite a bit	A lot	Don't know
9. Your parent(s)/guardian(s)/caregiver(s) tell you that you can't participate	Not at all	A little	Quite a bit	A lot	Don't know
10. You have too many responsibilities at home	Not at all	A little	Quite a bit	A lot	Don't know
11. You are working at a paid job	Not at all	A little	Quite a bit	A lot	Don't know
12. You didn't feel comfortable participating	Not at all	A little	Quite a bit	A lot	Don't know

On an average school or workday, how many hours do you spend doing the following activities?

13. Working on homework (If you are not in school, please do not answer)	Never	Less Than 1 Hour	1-2 Hours	3-4 Hours	5-6 Hours	7 Or More Hours
14. Watching TV	Never	Less Than 1 Hour	1-2 Hours	3-4 Hours	5-6 Hours	7 Or More Hours
15. Playing video games	Never	Less Than 1 Hour	1-2 Hours	3-4 Hours	5-6 Hours	7 Or More Hours
16. On the internet (but not playing video games)	Never	Less Than 1 Hour	1-2 Hours	3-4 Hours	5-6 Hours	7 Or More Hours

17. Talking to friends electronically (by SMS, etc.)	Never	Less Than 1 Hour	1-2 Hours	3-4 Hours	5-6 Hours	7 Or More Hours
18. Doing chores/jobs at home	Never	Less Than 1 Hour	1-2 Hours	3-4 Hours	5-6 Hours	7 Or More Hours
19. Reading for pleasure	Never	Less Than 1 Hour	1-2 Hours	3-4 Hours	5-6 Hours	7 Or More Hours
20. Improving one of your skills	Never	Less Than 1 Hour	1-2 Hours	3-4 Hours	5-6 Hours	7 Or More Hours
21. Exercising or being physically active	Never	Less Than 1 Hour	1-2 Hours	3-4 Hours	5-6 Hours	7 Or More Hours

ADDENDUM B

Permission to conduct research by the Department of Education



Enquiries : IM Mallmane
Reference no. : 16/4/1/38-2009

Tel: 0514048662
Fax: 051 4477318

2009-10-07

Director: Thabo Mofutsanyana Education District
Private Bag 817
Witsieshoek
9870

Dear Mr Chele

NOTIFICATION OF A RESEARCH PROJECT IN YOUR DISTRICT

Please find attached a copy of the letter giving Mr. MJ MALINDI and PROF. LC THERON permission to conduct research in the Thabo Mofutsanyana District. They will conduct this research in identified school with learners in Grades 8 – 11.

Yours sincerely


FR SELLO
DIRECTOR: QUALITY ASSURANCE

Directorate: Quality Assurance
Private Bag X20565, Bloemfontein 9300
Sylrets Center, 65 Maitland Street, Bloemfontein
Tel: 051 404 8750 / Fax: 051 447 7318
E-mail: quality@edu.fs.gov.za

www.fs.gov.za

ADDENDUM C

Consent form



NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
VAAL TRIANGLE CAMPUS

PO Box 1174, Vanderbijlpark
South Africa, 1900

Tel: (016) 910-3076
(016) 910-3094/073 88 33 064
Fax: (016) 910-3078
E-mail: Macalane.Malindi@nwu.ac.za
Linda.Theron@nwu.ac.za

CONSENT FORM FOR YOUTH: PATHWAYS TO RESILIENCE YOUTH MEASURE - FRS

PATHWAYS TO RESILIENCE: FORMAL SERVICE AND INFORMAL SUPPORT USE PATTERNS AMONG YOUTH IN CHALLENGING SOCIAL ECOLOGIES

SIGNATURE PAGE FOR YOUTH: PATHWAYS TO RESILIENCE YOUTH MEASURE -FRS

"I have read the explanation about this study. I have been given the opportunity to discuss it and my questions have been answered to my satisfaction. I hereby consent to take part in this study. However I realize that my participation is voluntary and that I am free to withdraw from the study at any time": (If you agree, please place an "X" in the 'yes' boxes to show that you understand and agree with each statement. You do not need to consent to all studyactivities in order to participate)

1. I understand the information about the study provided in the Information Letter. Any questions I had were answered. **Yes, I understand []**

2. If I am uncomfortable answering any question, I may choose not to answer. **Yes, I understand []**

3. Information will be collected directly from me by means of a questionnaire. **Yes, I understand []**

4. I give permission for the researchers to contact me to invite me to participate in a one-on-one interview and understand that I have the right to refuse to do this if I wish. **Yes, I understand []**

5. I give permission for the service that referred me to this study to release their last known contact details for me in case I have moved since starting the study. **Yes, I understand []**

6. I understand that what I say may be quoted in publications, presentations and the final report. I also understand that I will never be identified personally. If I become concerned with anything I said, I can ask for parts, or all, of my questionnaire responses not to be quoted. **Yes, I understand []**

Full name of youth participant

Signature of youth participant

Signature of researcher

Signature of guardian/parent / adult in loco parentis

Date

Date

FUTURE CONTACT PAGE

You may contact me: yes / no.

If yes, the best way to reach me is:

Address: _____

Email: _____

Second Email: _____

Phone Number: _____

Cell Phone Number: _____

No, you may not contact me about future participation in this study.

Would you like us to send you a short summary of the study when it is complete?

Yes

No

Please provide an address to which you would like it sent:

Address: _____

Email: _____

Second Email: _____

ADDENDUM D

Permission to use PRYM in study



Linda Theron
School of Education Sciences
Faculty of Humanities, VTC
NWU
P.O. Box 1174
Vanderbijlpark
1900

05 August, 2011

Dear Prof Theron

The Resilience Research Centre gives Angelique van Rensburg permission to include the PRYM as appendix to her master's dissertation.

The study presented in the manual is however not to be replicated without the expressed permission of the Principal Investigator (Michael Ungar, PhD, Dalhousie University, Canada) or the South African Principal Investigator (Linda Theron, DEd, North-West University, South Africa).

Sincerely,

A handwritten signature in cursive script, appearing to read "Linda Liebenberg".

Linda Liebenberg, Ph.D.
Co-Director, Resilience Research Centre
Adjunct Professor, School of Social Work
Dalhousie University
6420 Coburg Rd
Halifax, NS, B3H 2A7, Canada
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Fax: 902 494 7728
Email: Linda.Liebenberg@dal.ca
www.resilienceresearch.org

ADDENDUM E

Proof of language editing

H C Sieberhagen

Translator and Editor

SATI no 1001489

082 3359846

CERTIFICATE ISSUED ON 14 NOVEMBER 2011

I hereby declare that I have edited the language of the
following dissertation submitted by ms Angelique van Rensburg

The effect of service-use on resilience in at-risk youth :
a South African study



H C Sieberhagen

SATI number **1001489**

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