

## **1.1 INTRODUCTION**

Resilience manifests when individuals prevail in adverse circumstances and bounce back from hardships and revert to their former level of functioning or rise beyond, to a higher level of performance than before the onset of hardships. Research in the field of resilience indicates that resilience is developmental in nature and interactive with adversity (Blum, McNelly & Nonnemaker 2000:29; Masten 1994:5). The resilience of survivors of the most severely adverse historical and economical events has been well documented in the history of mankind, e.g. holocaust survivors after the Second World War, great people who fought against injustices in society and in South Africa, great academics, politicians and human rights activists. In South Africa, neither the professed inferior and restrictive education system administered to the black population nor apparent constraints of township life deterred the resilient people from advancing well beyond the boundaries set by the government to limit their knowledge, experiences and will to survive. The strength of character shown by the resilient individuals to break the set and restrictive boundaries and establish new world trends in dealing with adversity is one of the motivations for this study.

This study looks at resilient learners in the township schools of today who, against the odds, continue to perform better academically, socially and emotionally than could rightfully be expected from them in their environment. This superior performance by the learners in township schools occurs in a background of adversity as demonstrated by the social and economic challenges faced by the communities, poorly resourced schools (Tihanyi & Du Toit 2005:28) and overcrowded classes with high teacher : learner ratios (Hammett 2008:346; Prinsloo 2007:167; Onwu & Stoffels 2005:82). This study looks at how the school environment contributes to the level of the learners' resilience, both positively and negatively.

Townships in the past were known and revered for their vibrant entertainment, e.g. music and drama; they were a melting pot of languages and cultures created by people from varying cultural backgrounds. These positive factors have remained a magnet for tourism in South Africa, bringing visitors to our museums and houses of political struggle heroes who fought against apartheid, e.g. Nelson Mandela and Archbishop D. Tutu's homes in Soweto and Solomon Mahlangu's home in Mamelodi. Townships embody vibrancy, cultural diversity, pride and a sense of belonging. They have a strong history of origin, survival and accomplishments; their history shows resilience and a sense of achievement. Most

townships in South African are old and each have their own proud historical backgrounds, monuments and communities who strive to uphold their proud origins and history of resilience. My opinion is that each township fosters a sense of pride in the future generations.

Today township life in South Africa is still full of challenges and adversities which relate to the current century, and is a reflection of the economic and social development of the country. The winds of change are partly generated by the developing economy which is placing a larger strain on the township environments because of relaxed influx control policies, which lead to informal housing settlements. Informal housing settlements place a burden on under resourced township environments and schools because they are unplanned developments without any infrastructure in place. This forces townships to share their meagre resources available in their environment. However, one of the strengths of township communities, in most residential environments, include the resilience of some community members to find strategies and ways to generate entrepreneurial activities to survive and attract business to the community. These entrepreneurial skills have in many instances been blamed for creating unsafe and adverse environments for learners, e.g. shebeens built next to a school and being open during school times. These conditions affect the education of the learner and more broadly their performance and behaviour.

The black township adolescent and youth in South Africa have often been the cornerstone of revolutionary changes and are the key to democratic transformations. The township youth of the past as a result, were revered for their fierce and unrelenting vigour in enforcing educational changes to inform democracy and revolutionise the country by initiating political riots and civil disobedience. This however proved detrimental to the educational development of the black child, e.g. the 1976 riots and the period that followed immediately after. According to Van Zyl Slabbert, Malan, Marais, Olivier and Riordan (1994:10), black township youths were at the centre stage of political transformation during the apartheid era. Harber (2001a:68) indicates that schools in South Africa have been affected by violence which has resulted in many children being raised in violent environments. Harber (2001b:262) maintains that the violence that South African children are exposed to in their developmental environment has a negative effect on their development. He (Harber 2001b:262) suggests that violence makes them *'immune to violent actions.... they see violence as an acceptable form of expression and a way of channelling their emotions'*. His views are supported by the recent reports of violent acts carried out by learners on other learners and teachers in schools (Burton 2007:1). Could the violence of today emanate from violent reactions propagated by the State response to the peaceful protests of 16 June 1976? The answer to this question, however, is not the focus of this study, but the behaviour of learners during this

period of school riots and boycotts predisposed them to more risk and danger because state laws and policies were ignored, leading to lawlessness and anarchy in affected schools. The resilience of learners in affected schools appeared to be in doubt as the education and future of learners were placed at risk for political gains.

My argument of less-resilience, inherent in the behaviour of school youths in the aftermath of June 16<sup>th</sup> 1976 is paradoxical and may be inferred from the demonstrated risk it incurred. The violent murder by the police of Hector Peterson and Hasting Ndlovu, the injury and maiming of youths and community members led to the spread of riots to other townships, characterised by school disruptions, state disobedience, a tense and volatile climate (Saunders 1994:235; South African History Online July 2008). The violent demonstrations by the youth in 1976 were targeted towards the state in order to promote and demand political change and democracy, but the violent acts perpetrated by the youth of today border on delinquency and crime.

In comparison with the earlier challenges experienced by black township adolescents, the stressors and struggles in township schools have changed from political uprising to bullying, violence and disruptive behaviours which further perpetuate unhealthy development for the township high school learner. Kynoch (2003:1) declares that the township of the past era was safer than the current township because of violent crimes. The violence and disruption of healthy development currently observable in township schools and many South African schools as revealed in media reports might expose learners to a future of uncertainty which contravenes their fundamental human right to safety and security and a healthy developmental environment. The National School Violence Study (NSVS) conducted by the Centre for Justice and Crime Prevention (CJCP) shows that children are at a greater risk of experiencing crime at school and that schools have become a breeding ground for crime (Burton 2008a:2, 15, 25, 31). Of the 12,794 learners who participated in the study, 15.3% learners reported various experiences of school violence e.g. assault, robbery, sexual violence, being threatened with violence, bullying, etc., where crimes are committed by fellow learners people they know (Burton 2008a:xi-xiii). Burton (2008a:xiii) further indicates a strong correlation between exposure to crime and violence, and personal experiences of violence by learners both at home and in their communities, as most of the victims of crime were also assaulted at home. Exposure to risk factors has become wider and wider with the continuation of corporal punishment at schools (Burton 2008a:xiii; Ward 2007:22). A related study conducted by the Centre for the Study of AIDS in Limpopo province's four districts, investigating the learners' perceptions of safety, found that schools expose learners to more danger, e.g. drugs, weapons and unsafe playgrounds and learners' greatest fear was the exposure to and threat of experiencing crime (Lubbe & Mampane 2008:133, 135).

The challenges experienced by most schools in South Africa as a result of the violent behaviour of learners has motivated the Gauteng department of education to implement an early warning system, the Hlayiseka School Safety Programme, to prevent further outbursts of violent behaviour in schools (Gauteng Provincial Government, Department of Education, 15 April 2008). The Gauteng MECs for Education and Community Safety, Angie Motshekga and Firoz Cachalia, indicate the importance of schools to develop safety plans and implement safety incident management mechanisms and to educate learners about conflict management and how to resolve discords rationally and without resorting to violence (Gauteng Department of Education 15 April 2008, Gauteng Provincial Government Portal 20 February 2008). The urgent need for the Department of Education to teach learners life skills that will enable them to manage conflict and stressors in their lives and thus promote resilient behaviour and safe environments for development is yet another strong motivation for this study.

This chapter will proceed with a brief discussion on the rationale and the purpose of the study, the research questions, the definition of constructs used in the study, the research framework and the plan of inquiry including the methodology of the study and will conclude with a discussion on the rigour and limitations of the research and an outline of the chapters of the thesis.

## **1.2 RATIONALE OF THE STUDY**

The main influencing factors in deciding on this study are an imperative to further explore the construct resilience as it is manifested in middle-adolescent learners in a black township school, and to understand the role their school plays, as a developmental and social system, in influencing the development of resilience in these learners. Middle-adolescent learners are at a transitional stage of their development, from childhood to adulthood and from an intermediate phase to a senior phase of their school-based education. Furthermore, it was shown in 1.1 that South African schools are experiencing more crime and violence due to various factors and this has predisposed the developing middle-adolescents to a lot more risk, which can contribute negatively to their development and future prospects. Experiences, perceptions and feelings of success and optimism towards successful future goals within environmental conditions that threaten the safety and security of individuals are paramount for the healthy development and the future of middle-adolescent learners in this study. Werner and Smith (1982:158), Joseph (1994:30) and Luthar (1991:600) refer to 'stress-resistant' or resilient children. Resilient individuals who persist and remain focused towards a healthy development in conditions of adversity and high risk, evident in township schools and communities, can be likened to those labelled 'stress-resistant'. The analogy of resilience to

such a disposition of immunity to stress signifies the strength and tenacity of the resilient individual.

A resilient outlook and character allows an individual to have an optimistic view in life, to advance towards future goals and see the glass as half-full with the focus on successful resolutions despite adversity. Werner and Smith (1982:3) confirm that resilient children tend to develop healthily despite exposure to adversity when they signify that: they have '*self-righting tendencies ... that appear to move them towards normal development under all but the most severe circumstances*'. My perception is that middle-adolescent learners in township schools are exposed to more risk factors than protective factors, which threaten their normal development. In such an environment resilience is paramount in resisting the risk factors and promoting the identification, building and utilisation of protective factors to ensure a healthy development and good future perspectives.

Resilience must not be perceived as a once-off occurrence or a mere trait, it is a process and it cannot be isolated from the individual's developmental process, because it is interactive with development. Luthar, Cicchetti and Becker (2000b:546, 552) indicate that resilience is a dynamic developmental process and that resilience studies show changes in developmental pathways over the individual's life span. Most importantly, resilience becomes evident in situations of adversity through manifested 'competence in age-salient developmental tasks' (Masten & Obradović 2006:15). Teaching in schools aims to impart knowledge and to empower learners with skills, competencies and understanding in a variety of learning areas. Resilience cannot be facilitated or measured through the same curricular activity or method used in teaching and assessing academic learning areas, e.g. maths. The Life Orientation learning area aims to impart life skills to learners, including psychosocial and interpersonal skills to enable them to make informed decisions, manage themselves and communicate better. It also aims to influence positive changes in learners and their environment, to lead a productive and effective life. It is difficult to assess the acquisition of such skills and change using regular assessment instruments in class, e.g. tests and projects. An assessment of the successful acquisition of the learned life skills would include looking at the application and knowledge of acquired skills in observable changes in behaviour, the willingness and capacity of the individuals to actively demonstrate growth and maturity in the choices they make and self-expression of emotional, physical and social development and maturity. The measurement of resilience could thus include observable behaviour through demonstration of abilities to 'cope' and deal effectively with the demands and challenges of everyday life and self-reporting.

The school with a focus to help learners succeed beyond academic results and that aims to develop and promote the emotional, physical, social and psychological wellbeing of all its learners is promoting healthy development in their learners. The question remains whether such a school could also be said to automatically have a resilience focus. In order to understand the contributions to resilience by the system, knowledge of how the system functions and the threats facing the system is essential because some of the risk and protective factors are variable and context-based and as a result, some programmes are bound to be contextual and ethno-specific (Lemerle & Stewart 2005:4). An investigation of the school's role in supporting learners' resilience translates into the following question: What role could the school, as a system, play other than, or in addition to, presenting standard curricular programmes to support the resilience of learners?

The focus of this study is rather unique, as it will look at the perception of middle-adolescent learners in a black-only school on what is influencing their resilience, both positively and negatively in the school. The black-only schools are mostly situated in black-only residential areas and with the new democracy, redress in terms of educational resources, both human and material, is often still lacking. The school has the task to cater for a particular socio-economic group in the background of the concurrent environmental problems that compound on the existing adolescent problems of Grade 9 learners.

I submit that every individual and thus in this instance learner, has the potential to be resilient, but to enhance the resilience potential inherent in every individual the social systems, schools, families and communities have a major role to play. The school can invest in either preventative or remedial strategies to promote resilience in learners. However, I am not oblivious of the fact that these collective programmes are not magical wands which can simply eradicate the present stressors and risk factors present in the learners' lives. I am fully aware that it could be misleading to formulate the construct of resilience into programmes that address developmental skills with the aim of teaching such skills in order to influence resilience without acknowledging the limitations of such programmes.

Therefore, school programmes are not what this study aims to address. However, the South African school curriculum for Life Orientation addresses the attributes found by most resilience literature to influence resilience in learners e.g. problem solving abilities, positive self-concept, achievement-oriented attitude, motivation (Benard 2004:29; Thomsen 2002:25-26; Joseph 1994:28-31). The learners' perceptions of what in the school environment including the curriculum and how it is taught influences their resilience will inform me of the strengths and weaknesses of the school as perceived by learners and also on what may be irrelevant or even counter-productive within the school system. Furthermore, the quality of

interaction between the learners and the school will be elucidated by the learners' perceptions on what role the school plays in influencing their resilience. Finally, the nature of adversities, vulnerabilities and accessibility of available resources as experienced by the learners will become clear as a context of their resilience

### **1.3 THE PURPOSE OF THE STUDY**

This thesis forms part of a wider research project sponsored SANPAD in South Africa and the Netherlands, which is looking at the relationship between middle-adolescent learners' degree of resilience (as demonstrated especially in school-related behaviour) and the school context. The purpose of this study is to explore and describe the perceptions of middle-adolescent learners with varying degrees of resilience from schools in a particular township, and the existing transactional process between their school and themselves. The study aims to understand and explain the nature of the relationship between the research variables, these being resilience, the township school environment and its middle-adolescent learners. Ultimately, the aim is to identify and compare the influence of the black-only township school on high and low degrees of resilience shown by middle-adolescent learners. The findings of this study will hopefully lead to recommendations being made which will promote and build resilience enhancing school environments in South African schools by looking at the possibility of transferring the findings to schools with comparable contextual influences.

### **1.4 RESEARCH QUESTIONS**

The main question directs the focus of the study and is exploratory in nature:

*How does the school influence the resilience of middle-adolescent learners in a black-only township school?*

The main question aims to understand, interpret and explain the relationship between the construct of resilience (including less-resilience) and the school context. The research aims to investigate attributes of the school environment that contribute to the resilience or less-resilience of learners by finding out 'what' in the school environment influences the resilience and less-resilience of learners and 'how' the identified school attributes influence the resilience and less-resilience of learners.

To clarify the main question two sub-questions will be asked:

- a. What are middle-adolescent resilient learners' experiences of their black-only township school system?
- b. What are middle-adolescent less-resilient learners' experiences of their black-only township school system?

## **1.5 DEFINITION OF KEY CONCEPTS**

### **1.5.1 RESILIENCE**

Many definitions of resilience exist. The definition that is adopted for this study was formulated by members of the SANPAD Project which this study forms part of, namely:

Resilience is having a disposition to identify and utilize personal capacities, competencies (strengths) and assets in a specific context when faced with perceived adverse situations. The interaction between the individual and the context leads to behaviour that elicits sustained constructive outcomes that include continuous learning (growing and renewing) and flexibly negotiating the situation.

This definition will be deconstructed and operationalised in the formulation of the resilience questionnaire in Chapter 3.

### **1.5.2 LESS-RESILIENT**

The construct less resilient is preferred instead of “non-resilient”, which occurs in most literature. Every individual has the innate ability to be resilient and may in degree thus be more or less resilient and not “non-resilient” (Henderson & Milstein 2003:3; Thomsen 2002:ix). Werner and Smith (1982:49) differentiate between “non-resilient” children and resilient children by referring to the “non-resilient” children as those children who developed serious learning and behavioural problems. Less resilient and “non-resilient” children have the same behavioural characteristics however, the construct less-resilient acknowledges their capacity for resilience, which is less compared to the resilient learners.

### **1.5.3 PROTECTIVE FACTORS**

Resilience is noticed when individuals are experiencing adversity in their life or environment. To ameliorate the situation and protect the individual from adverse circumstances, protective factors play a major role. The following definitions of protective factors describe how they provide protection during adversity:

- Protective factors are influences that modify, ameliorate, or alter a person’s response to some environmental hazards that predispose them to a maladaptive outcome (Rutter 1985:600).
- Protective factors are key constructs in the conceptualisation of resilience. They moderate the effect of individual vulnerabilities or environmental hazards so that a given developmental trajectory reflects more adaptation in a given domain than would be the case if protective processes were not operating (Hauser 1999:4).

#### 1.5.4 RISK FACTORS

Risk factors predispose an individual to harm, they are stressors that exist in life and affect an individual either positively or negatively. The negative effect of risk factors becomes more prominent in the absence of protective factors. Risk factors can be defined as:

- Individual or environmental hazards that increase the person/child's vulnerability to negative developmental outcomes (Engle, Castle & Menon 1996:621).
- Negative experiences associated with problem outcomes for some children (Minnard 2001:233).
- Processes that predispose individuals to specific negative or unwanted outcomes (Mcknight & Loper 2002:188).

#### 1.5.5 MIDDLE-ADOLESCENT

The participants in this study are within the developmental stage of middle-adolescence (period between 14 to 16 years), which is a stage that requires them to search for their identity (Carr-Gregg & Shale 2002:34; Gillis 1996:71). Academically, middle-adolescents are required to make career choices. As a result, they are expected to have the decision making capacity which will enable them to direct their future plans. Middle adolescence is defined as:

*The crossover period between childhood and adulthood, a period that is characterised by experimentation and the acquisition of skills necessary to make adult decisions (Gillis 1996:73).*

#### 1.5.6 TOWNSHIP ENVIRONMENT, TOWNSHIP SCHOOL AND BLACK TOWNSHIP SCHOOL

- A South African township is an urban residential area which originated in the 1950's as rezoned areas that organised societies into race-space divisions away from central business districts and other areas of employment (Kotze & Donaldson 1998:467). Township refers to the (often underdeveloped) urban living areas that, under Apartheid, were reserved for non-whites (principally black Africans and Coloureds, but also working class Indians) and were usually built on the periphery of towns and cities (Wikipedia n.d). Therefore, a black township is a residential area for blacks, which Bremmer (2000:186) refers to as a 'segregated ghetto'.
- A township school is a school situated in a township area and a black township school refers to a school in a black township and with a predominant number of black learners.

## 1.6 THEORETICAL FRAMEWORK

### 1.6.1 INTRODUCTION

This section of the chapter will be fully revisited in Chapter 2 and aims here only briefly to argue and build the theoretical frameworks that will guide this study. Firstly, a resilience framework, the Resiliency Wheel (Henderson & Milstein 2003; Thomsen 2002), will be discussed, ultimately leading to the operationalisation of the construct resilience in Chapter 3. Secondly, resilience will be discussed from the ecological perspective, using the Bioecological Model of Bronfenbrenner and Morris (1998) and Tudge (2008), looking at how the environment influences the development of resilience in middle-adolescent learners and including the complex interconnection and interaction of the systems. The statement below demonstrates the understanding that challenges are part of life and that accomplishing developmental milestones or age-salient challenges successfully denotes successful adaptation:

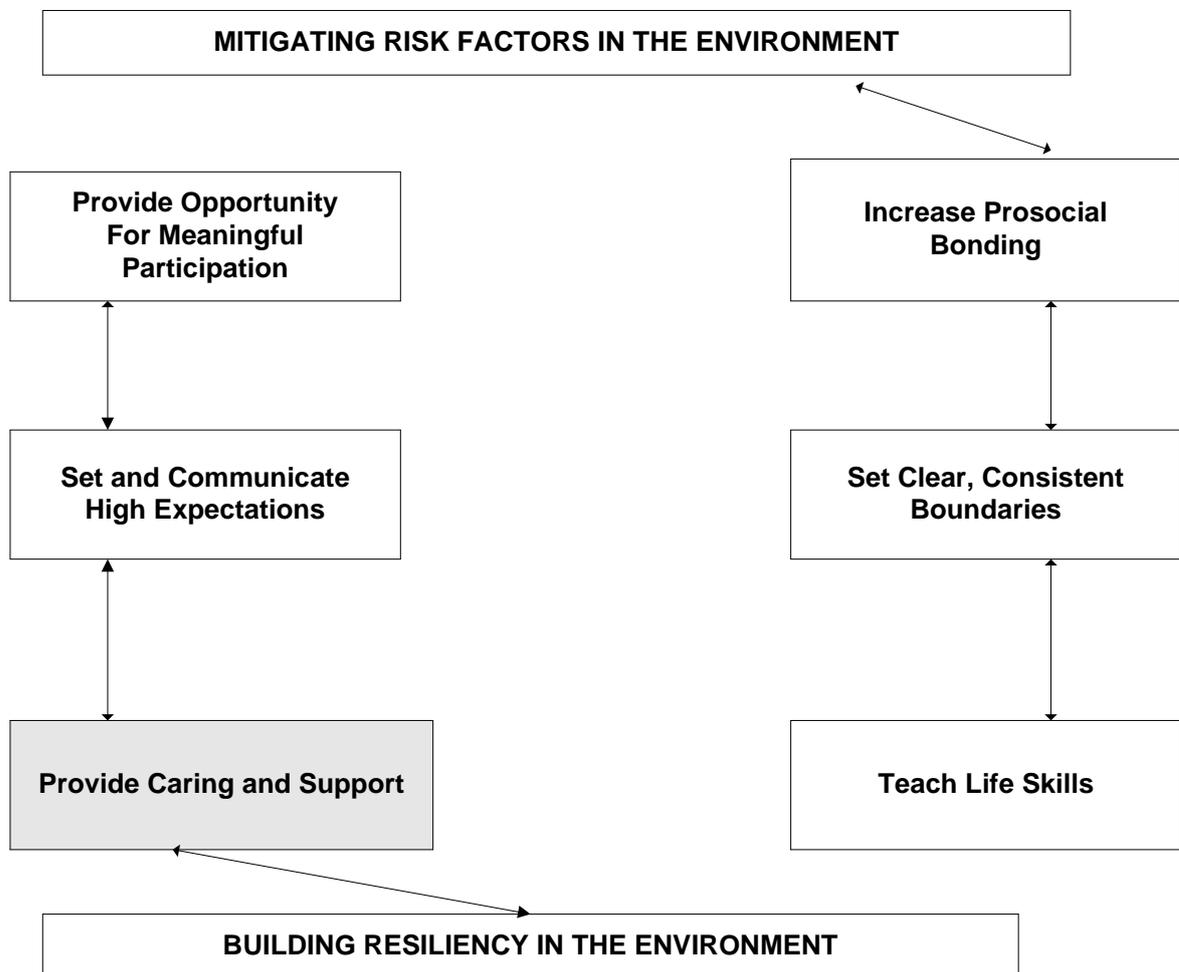
*Children develop in a dialectical process of meeting challenges, resolving them, and then meeting new ones. If the challenge is too severe, the developmental process breaks down. Resilience is a name for the capacity of the child to meet a challenge and use it for psychological growth (Kumpfer 1999:210-211).*

### 1.6.2 THE RESILIENCY WHEEL FRAMEWORK

I have chosen the conceptual framework of Henderson and Milstein (2003), the Resiliency Wheel, to serve as a base for guiding me in the collection, analysis and interpretation of data from the perspective and context of the participants within an existing frame of resilience research (Kumpfer 1999:212). The choice of the Resiliency Wheel framework (2003) is based on its systemic approach, the interactive processes and its stance on preventative processes through the injection of protective factors.

Henderson and Milstein (2003:12), state that resilience can be fostered or built within a school environment using their Resiliency Wheel (which will be fully discussed and critiqued in Chapter 2). They (Henderson & Milstein 2003:14) argue that the conditions required to build resilience in all learners are the same. This assumption implies that, in the case of my study, both resilient and less-resilient learners could require the same protective factors within the particular school environment to foster their resilience. The Resiliency Wheel (Figure 1.1) presents guiding principles used by Henderson and Milstein (2003) and Thomsen (2002) to train teachers on how to build resilience in learners. The principles of the Resiliency Wheel appear generic to most policies in education and are also reflected in the South African Schools Act policy document (Department of Education, SASA 1996), the Life

Orientation curricular programme (Revised National Curriculum Statement 2002), and the Inclusive Education policy (Department of Education, White Paper 6). The current school policies foster the principle of schooling the whole child by ‘*supporting the education of all learners*’ and adhering to an inclusive school policy through its curriculum, assessment and classroom management (Sands, Kozleski & French 2000:150). My argument is to question the ability of school managers and teachers of the participating schools to implement policies and to enable and ensure that resilience in learners is encouraged and supported. Furthermore, to allow learners to relate and discuss their perceptions of the schools’ ability to apply, implement and interpret policy through curricular and extra-curricular activities and how the interactive relationships existing between learners and the school foster their resilience or less-resilience.



**Figure 1.1: The Resiliency Wheel** (adapted from Henderson & Milstein 2003:12)

The Resiliency Wheel (Henderson & Milstein 2003:12) principles are presented as six steps consistently required by environments of care to foster resilience by providing environmental protective factors and conditions that support individual protective factors (Henderson & Milstein 2003:11-15). The three steps that are identified for mitigating the impact of risk on

individuals with the aim of promoting or fostering resilience are: increasing bonding, setting clear and consistent boundaries and teaching life skills. The three steps suggested for building resilience in learners are: providing care and support, setting and communicating high expectations and providing opportunities for meaningful participation.

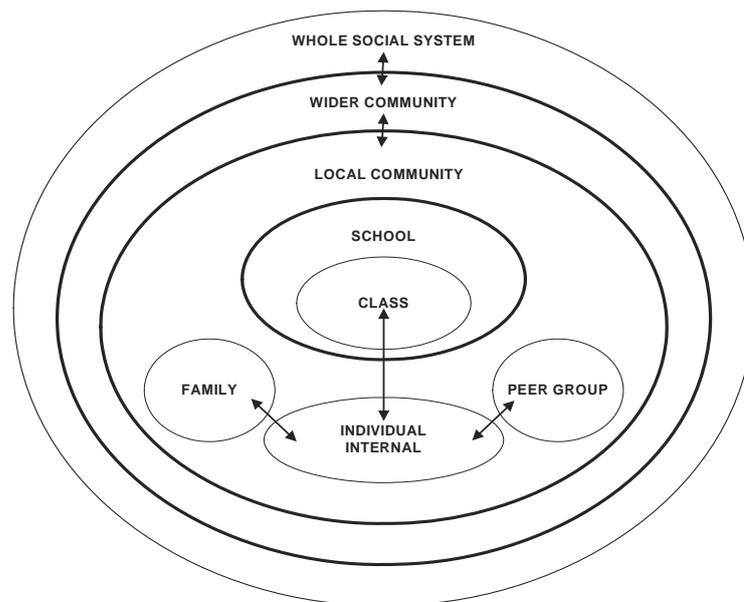
The Henderson and Milstein (2003) framework is cognisant of risk factors that can be encountered in the environment and suggest steps that can be considered to alleviate risk. The Resiliency Wheel works on two strategies of alleviating risk and building resilience by providing protection against risk. The framework is relevant for the township environment and township learners because it is not oblivious of particular risk factors that can expose learners to adversities existing in a township environment. The underlying factor for the Resiliency Wheel is a motivation that the presence of risk does not impede building resilience for learners. The longitudinal study of Werner and Smith (1982) of the Kauai children discovered that resilience was fostered by nurturance, support and care, attributes that are implied in the Resiliency Wheel (Werner 1995:81-82). Furthermore, the framework has a holistic approach to child development as it considers the functions, needs and resources of learners and the environment in which they exist, i.e. the biological and social aspects of the individual (Magnusson & Törestad 1993:430-431).

As a result, the Resiliency Wheel framework (Henderson & Milstein 2003), looks at ways of transforming the interaction of the individual learner with the environment by motivating ways to enable access to available resources and to support the resilience of learners. The model does not adopt a deficit approach by looking at ways to 'change' learners in order to make them 'suitable' to the educational environment. Instead, steps are suggested for transforming the environment to support the individual resilience of learners.

### **1.6.3 THE BIOECOLOGICAL APPROACH**

The ecological theory of human development, which has been developed into the Bio-ecological theory of development as posited by Bronfenbrenner and Morris (1998a,b), relates to the developing individual, the environment and the interaction between the two. The Bio-ecological theory will be fully discussed and critiqued in Chapter 2. The use of the Bio-ecological theory gives a clearer picture of my study. It is an evolving model and integrates features of the initial ecological model of the 70's with the newly developed ones of the 90's (Swart & Pettipher 2005:13). The middle-adolescent learner is in the process of a transitional development from childhood towards adulthood and exists in multiple social systems, which interact with each other on a daily basis as part of their ecological system. The social systems within which the middle-adolescent learner exists, are interconnected, interrelated, and interactive with each other and the result is that each system influences and is

influenced by the other (reciprocal interaction) (Bronfenbrenner 1979:18&21; Swart & Pettipher 2005:10). To illustrate the intensity and influence of interactions between the developing individual and the environment, Bronfenbrenner (1979:21) reiterates that the child is not a *tabula rasa*, but a dynamic entity that structures their living environment and as a result, brings meaning to their development as they actively interact with the environment. The school environment, which purports to provide learning and development to the learner, requires a lot of interaction from the learner to ensure the optimal experience of learning. The Ecological theory (Figure 1.2) from which the Bio-ecological theory originates puts the individual at the centre of systems which impact on the individual's development. Middle-adolescent learners in a township environment are influenced and in turn influence events around them. Such interactions between the developing person and the context of development are best represented by Bronfenbrenner's Ecological framework. The framework can help in depicting and capturing the risk and protection experience drawn by the middle-adolescent learner from the environment.



**Figure 1.2: The Eco-Systemic Framework** (adapted from Donald, Lazarus & Lolwana (1997:65))

Bronfenbrenner (1979:7) states that the ecological environment is '*conceived as extending far beyond the immediate situation directly affecting the developing person,*' and includes the links or interconnections that directly and indirectly influence the person. For the purpose of my study, more emphasis will be placed on the school as a microsystem because it is my area of study. According to Bronfenbrenner (1979:22), the microsystem is defined as '*a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics*'. This microsystem is

therefore the actual environment where a person and environment interaction exists, e.g. the family, school, peers, who are all in a dynamic interaction with each other.

## 1.7 PLAN OF ENQUIRY

### 1.7.1 RESEARCH PARADIGM

A research paradigm is a scientific frame of reference that the researcher adopts for the study (Garbers 1996:337). Garbers (1996:337) denotes that a paradigm includes:

*... the metaphysical, theoretical, conceptual and instrumental conflictions of a particular scientist and those of the group which, in the scientist's discipline, has sanctioned the paradigm as the authoritative method of explaining the phenomenon in the field of study.*

Denzin and Lincoln (2005:22) further state that a paradigm is 'a basic set of beliefs that guide action', dealing with the researcher's worldview. Various research paradigms exist and Figure 1.3 gives a synopsis of research paradigms from reviewed literature. This study assumes a mixed method approach structured in two phases (see 1.7.2). Phase 1 (discussed in Chapter 3) is quantitative. Phase 2 (discussed in Chapter 4) falls within the Constructivist and Interpretivist paradigms, as it aims to interpret the participants' perceptions (which are interpretations themselves), constructed during the focus group of the phenomenon resilience and how it relates to the school context. The qualitative nature of the study alludes to Constructivism and Interpretivism by exploring the participants' understanding and constructions of knowledge (i.e. they construct their understanding of the environment and interpret their new constructed knowledge) of their social world and the researcher's interpretation and understanding of the phenomenon which is being studied (Ritchie & Lewis 2004:7). Through Interpretivism, this study intends to understand the lived experiences of participants in their deliberations, descriptions and interpretations of interactions in their social context (Henning *et al.* 2004:19-20; Ritchie & Lewis 2004:7).



| Element                               | Ontological Position   | Epistemological Position   | Methodologies  |
|---------------------------------------|--|--|--|
| <b>Positivism/<br/>Postpositivism</b> | Determination, Reductionism, Empirical observation and measurement, Theory verification (Creswell 2003:6; Denzin & Lincoln 2005:24; Henning <i>et al.</i> 2004:17) | Objectivists: Findings are true (Creswell 2003:8; Henning <i>et al.</i> 2004:18) | Experiments and surveys: verification of hypotheses, mainly quantitative methods (Creswell 2003:7; Henning <i>et al.</i> 2004:17-18).                                    |
| <b>Advocacy/<br/>Participatory</b>    | Political, Empowerment issue-oriented, Collaborative, Change-oriented (Creswell 2003:6,8-9)  | Subjectivists: Collaboratively created findings (Creswell 2003:10-11)            | Participatory, advocacy or emancipatory, Dialectical Action research, Mainly qualitative methods (Creswell 2003:11)  |
| <b>Constructivism</b>                 | Understanding, Multiple participant meanings, Social and historical construction, Theory generation (Creswell 2003:6, 8)   | Subjectivists: Created findings (Creswell 2003:8)                                | Qualitative approaches (Creswell 2003:19). Hermeneutical/dialectical: the researcher is a passionate participant within the world being investigated (Creswell 2003:8-9) |
| <b>Interpretivism</b>                 | Understanding, Interpreting meanings (Multiple realities), descriptive (Babbie & Mouton 2002:28-29; Henning <i>et al.</i> 2004:19-20; Ritchie & Lewis 2004:17&23). | Subjectivists: Value mediated findings (Henning <i>et al.</i> 2004:21)           | Mainly qualitative research methods, Descriptive analysis, Observations (Henning <i>et al.</i> 2004:20)  |
| <b>Pragmatism</b>                     | Consequence of actions, Problem-centred, Pluralist, Real-world practice oriented (Creswell 2003:6, 8)  | Both objective and subjective findings are valued (Creswell 2003:12).            | Mixed methods (Creswell 2003:13,19)  |

**Figure 1.3: Research Paradigms**

Johnson and Onwuegbuzie (2004:14) indicate that Constructivism and Interpretivism represent the qualitative purist's preferred research paradigms as they argue that multiple realities exist in a research. They (Johnson & Onwuegbuzie 2004:14) maintain that when research has multiple realities, time and context-free generalizations are neither possible nor desirable and research becomes value bound and a difficulty arises when making any inferences about the cause.

This argument appears to be relevant to my study because the perceptions of the participants about what it is in the school environment that supports their resilience can result in many individual specific factors which can be interpreted differently in different contexts. Context remains paramount in the interpretation of the experiences and the cause and effect of factors on the individual's life and experiences remain normative and specific to the

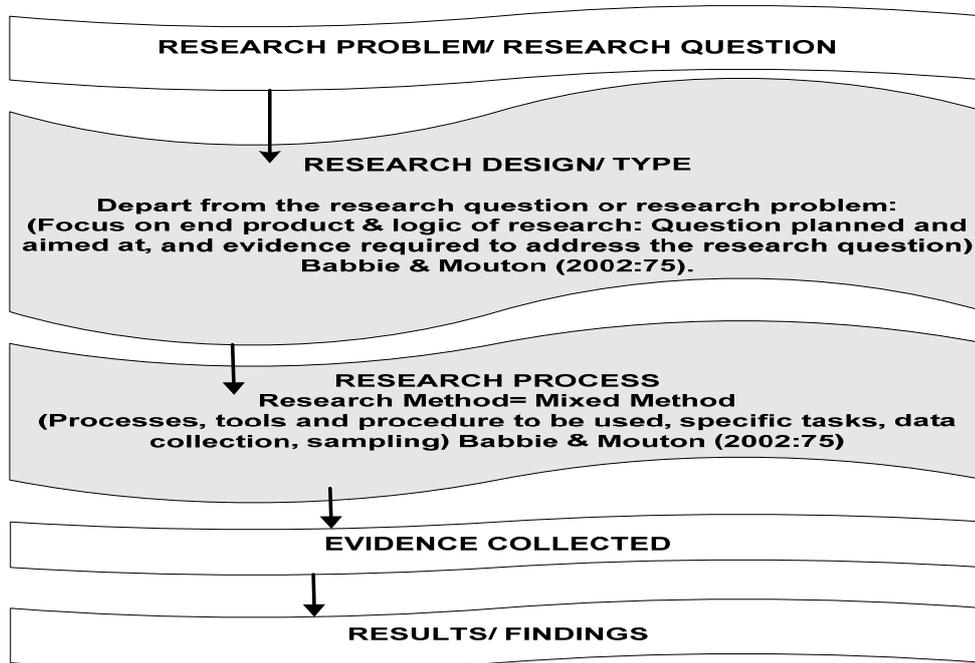
individual. These constructs of the participants' experiences of their environment need to be interpreted in the context in which they occur and using the respondents' worldview. I therefore agree with Johnson and Onwuegbuzie (2004:14) that in this research, multiple-realities will be encountered including a difficulty in determining the causes and effects of the findings. The strength of the Constructivist and Interpretivist research paradigms lie in their promise to answer all the research questions and the research plan aims to address their weaknesses at the level of analysis and drawing conclusions by choosing the Interactive Qualitative Analysis (IQA) method (Northcutt & McCoy 2004). The IQA method has steps that help to inform the researcher about factors that determine the causes and effects in the data collected. IQA is defined as '*a systems approach to qualitative research and the primary purpose is to represent the meaning of a phenomenon in terms of elements (affinities) and the relationships among them*' (Northcutt & McCoy 2004:197). Since IQA utilizes a constructivist approach to data collection and analysis (Northcutt & McCoy 2004:27), this study will allow the participants to use their current and past knowledge, experiences and perceptions to answer the research question.

Creswell (2003:12), Johnson and Onwuegbuzie (2004:18) and Hanson, Creswell, Clark, Petska and Creswell (2005:226) maintain that pragmatism is the best paradigm for a mixed method research because it draws on many ideas, uses diverse approaches and values both subjective and objective knowledge. Johnson and Onwuegbuzie (2004:16) argue that if methods do not provide a 'perfect solution' and do not fully answer the research question a balanced approach should be taken. I maintain that the Constructivist and Interpretivist paradigms chosen will answer the research question especially with the IQA method chosen for the study. I further argue that the paradigms chosen remain constructive and interpretive however coupled with the IQA method a balanced position is maintained (Johnson & Onwuegbuzie 2004:16-17; Northcutt & McCoy 2004:15). A pragmatic rule states that, '*the current meaning or instrumental or provisional truth of an expression is to be determined by the experiences or practical consequences of belief in or use of the expression in the world*' which practically affirms the 'effect or outcome-oriented rule'. Perception and lived experiences represents constructions and interpretations and the 'truths' of participants which will be captured, interpreted and analysed to answer the research question.

### **1.7.2 RESEARCH DESIGN**

A research design refers to the planning of the scientific enquiry, a '*blueprint of how you intend to conduct the research*', which includes designing a schedule 'of what to find out', 'how' it will be done and 'why' it should be done (Babbie & Mouton 2002:72-74). Babbie and Mouton (2002:75) warn against confusing research design with research methods, they emphasise that a research design attempts to answer the research question by using

different methods and procedures, (see the research process in Figure 1.4). This section of this chapter will address the shaded sections as it gives an indication of the research design and processes.



**Figure 1.4:** The Research Design process (adapted from Babbie & Mouton 2002:73-74)

Figure 1.5 indicates a mixed method research design matrix which includes both quantitative and qualitative research methods followed in two phases. The first phase will adopt a quantitative approach to identify resilient and less-resilient Grade 9 middle-adolescent learners using a self-developed questionnaire (the questionnaire is fully discussed in Chapter 3). The second phase will adopt a qualitative approach with emphasis on exploration of the phenomenon resilience amongst a particular group of participants and contextual description of how the school environment influences resilience in middle-adolescent learners (Henning *et al.* 2004:9). The mixed method approach adopted in this study is sequential, starting with quantitative data collection and analysis in Phase 1, which leads to Phase 2, the qualitative data collection and analysis using the IQA method.

|   |  |
|---|--|
| <b>Sequential Order</b>                                 |  |
| <b>QUANTITATIVE</b>                                     | <b>QUALITATIVE</b>                                       |
| <b>PHASE 1</b>  | <b>PHASE 2</b>   |
| <b>Highest status in identification of participants</b> | <b>Highest status in answering the research question</b> |

**Figure 1.5:** Mixed method design matrix (adapted from Johnson & Onwuegbuzie 2004:22)

Phase 1 is the initial approach which aims to explore the construct resilience in the school context and identify resilient and less-resilient participants of the study using the self-constructed Resilience questionnaire. The selected participant will participate in Phase 2 of the study, which aims to explore and describe the perceptions of the participants on the influences of the school environment on their resilience.

The research will follow a multiple case study approach using two secondary township schools. Henning *et al.* (2004:32) defines a case study as an investigation of a 'bounded system' with unity and totality of boundaries outlined. A school fits the definition with set specific boundaries in terms of structure (infrastructure), policies and institutional focus. Creswell (2003:15) states that in a case study the researcher is able to explore in depth using a variety of data collection procedures, the processes, programs or activities of the system. Using the school as a unit of study enhances this study and helps to address the research question.

### **1.7.3 DATA COLLECTION PROCEDURE**

The two phases of the study (mentioned in 1.7.2 and outlined in Figure 1.5) will be used to answer the main research question (1.4): *How does the school influence the resilience of middle-adolescent learners in a black-only township school?*

Phase 1 will follow a quantitative method by using a self-developed resilience questionnaire. The resilience questionnaire will be designed by deconstructing the definition of resilience to develop valid items, followed by a statistical analysis to determine the validity and reliability of the questionnaire. This phase is fully discussed in Chapter 3. The process of questionnaire design will be characterised by piloting and refining of the questionnaire with a selected class of learners in a school other than the schools of research, School 1. Item analysis will be conducted to establish the reliability of the questions or statements in determining resilience of participants. Depending on the results of the item analysis the resilience questionnaire will be reworked and administered to the research participants in Schools 2 & 3. Item analysis will again be done to the resilience questionnaire and depending on the results, the questionnaire will be reworked leading to a final questionnaire. Factor analysis will be conducted on the final resilience questionnaire and the participants for Phase 2 of the study will be selected based on their resilience score.

Phase 2 will be qualitative in nature and will follow the IQA process, starting with focus groups and followed by interviews with the identified resilient and less-resilient learners. In each school, four resilient learners will be selected blindly, based on their resilience scores, to participate in focus group A, and four less-resilient learners to participate in focus group B.

Learners will not be aware of their resilience status. The purpose of the Focus Groups will be to generate data and produce interview protocols (derived from the affinities developed by the group), identify affinities and the relationship between them and build/ draw mind-maps or pictures of the group's reality. Finally, two learners from each group will be selected to participate in interviews.

#### **1.7.4 DATA ANALYSIS AND INTERPRETATIONS**

Two data analyses and interpretations will be done for each phase. Phase 1 will follow a statistical analysis using the item and factor analysis of the resilience questionnaire to determine the quality of items and the questionnaire (Scorepak®: 2005:1) and hopefully to make an item selection for the final version of the instrument for use in black township schools.

Phase 2 of the study will be applying the IQA method. Participants play multiple roles in IQA since they are regarded as the source and analysts of data (Northcutt & McCoy 2004:199). Northcutt and McCoy (2004:43) use a metaphor of a quilt to describe the purpose and process of IQA focus groups as a systemic facilitation and representation of the discourse, to 'create its own interpretive quilt of meaning and then to construct individual quilts of meaning (interviews), where the two meanings are then used together as the foundation for interpretation'. The metaphor of a quilt is thus used to represent a system of affinities (patches), which will be formulated during the focus group discussions. The focus group discussions will also help to clarify the relationships (stitches) that connect the affinities identified. During IQA focus groups participants are required to work silently (individually) and then in groups to construct affinities that best answer the research question from their perspectives. After generating affinities, participants are then required to define and explore the meaning of their affinities and to later group them into themes and form mind maps. The role of participants as constructors of knowledge (generating affinities) is supported by their interpretation of their new knowledge (definition and grouping of affinities into themes). After the focus groups, some participants will be selected (based on their interactivity and responsiveness during the focus groups) for interviews where they will work with the focus group data to either change or agree with the final interview data.

#### **1.7.5 ETHICAL CONSIDERATIONS**

I will adhere to the Ethical Code Guidelines of the Faculty of Education, University of Pretoria. The permission to work in schools will be sought from the Provincial Department of Education and the relevant District Office who serve together with managers of the selected schools, as caregivers for learners in a school environment.

The following ethical requirements will be met (Henning *et al.* 2004:73; Ritchie & Lewis 2004:66-70; Creswell 2003:64-66):

- (1) Informed consent: participants will be informed of the objective of the study and of the procedure in which they will participate. Participants will further be informed about their voluntary participation and their right to withdraw from the activities when they no longer wish to participate. Because of the age of the participants (middle-adolescents), letters of consent will be sent to parents to ask permission for learners to participate in the study.
- (2) Anonymity and confidentiality: participants will be informed of the partial anonymity that will be maintained in the study. Full anonymity outside the research team cannot be guaranteed because of the method of data collection that will be adopted. Focus groups cannot guarantee full anonymity, because participants cannot be monitored for confidentiality outside the research team. However, participants will be assured of confidentiality of results especially by protecting their identity in the final report writing and publication of results.
- (3) Protecting participants from harm: the topic of discussion may induce some participants to recall or think of stressful experiences in their lives. After every focus group, discussion participants will therefore participate in a debriefing activity to facilitate relaxation and closure. Participants having signs of severe stress will be referred for counselling.

## **1.8 RIGOUR OF RESEARCH**

The construct rigour is attributed mainly to the quantitative or rationalistic paradigm and the criteria required to reach the goal of rigour are internal validity, reliability and objectivity (Horsburgh 2003:308; Morse, Barrett, Mayan, Olson & Spiers 2002:4; Emden & Sandelowski 1998:207). Rolfe (2006:307) maintains that rigour is achieved if a trained researcher can analyse the same data in the same way and come to the same conclusion, thus establishing the reliability of the results. Rigour in Phase 1 of the study (quantitative phase) will be established through proper questionnaire design and item writing, item analysis of a piloted questionnaire to establish the reliability of items (the appropriate statistical treatment of data) and final item analysis and item selection (Cohen, Manion & Morrison 2000; Babbie & Mouton 2002).

Qualitative research is highly criticised in much of the literature when compared to quantitative research on the basis that it lacks 'scientific' rigour and credibility, (Horsburgh 2003:308; Emden & Sandelowski 1998:207). Morse *et al.* (2002:4) state that for research to be considered worthwhile it should have 'true value, applicability, consistency and neutrality'.

Phase 2 aims to report on the experiences of participants and the focus is more on the authenticity of their report (Silverman 1993:10). Reliability of results in qualitative research is difficult to establish because reliability refers to the degree to which an instrument will give the same measurement each time it is used under the same condition, with the same subjects (Golafshani 2003:598), and this is not possible in this study because focus groups will only be conducted once. In using the IQA process and procedure, I intend to ensure that there is rigour and credibility in my study since the data collection and analysis process of this method is:

- Public, accessible, accountable and non-idiosyncratic
- Replicable within reasonable bounds and
- Not dependent on the nature of the research elements (especially the analysis), but on the rules of rationalization regardless of biases or meaning of elements (Northcutt & McCoy 2004:38).

## **1.9 CONTRIBUTIONS AND STRENGTHS OF THE STUDY**

The findings of the study will give an overview of resilience as perceived and demonstrated by South African middle-adolescent learners in two black only secondary schools and will hopefully contribute to the construct resilience nationally and internationally. The study will also contribute to an understanding of how learners interpret and understand their relationship with the school system and how they function within the system, including the benefits and detriments of being a learner in a black only township school. The learners' perceptions and constructions of their relationship with the school system will hopefully shed a light on how school policy is implemented in the school and how curriculum development and youth intervention initiatives are construed by learners. Furthermore, the perceived threats and resources available in the school system will be highlighted to help in supporting the resilience of learners in black only township schools.

The two schools participating in the research are from the same township and I assume they serve learners from similar backgrounds. However, normative and contextual differences can be expected because of factors such as policy implementation and interpretation, and access and utilisation of resources. As a result, knowledge gathered from the two schools can inform the education department, school managers and research community in the understanding of which factors within the school system contribute towards supporting the resilience of learners and which factors are detrimental to their resilience.

The study may add new knowledge on IQA research methodology from a South African perspective and the findings may contribute to the existing knowledge of IQA studies. The

resilience questionnaire that I constructed to identify the participants of the study will contribute in identifying resilience in learners.

## **1.10 PERCEIVED THREATS TO THE STUDY**

The findings of the study will not be generalized to other schools because of various factors including, the small sample size in Phase 2 of the study and the fact that the study is conducted in only two schools, in only one township. However, a comparison of the results between the two participating schools may lead to inferences and findings can be applicable to other schools in a similar context. A further possible threat to my study may be the IQA methodology, since it is relatively new and there is very little published literature to consult. In South Africa, I will be among the first few individuals to use the IQA method in my thesis, which serves as both a strength and a limitation. The strength will lie in my contribution to the new methodology and the new knowledge which may be uncovered by these means and the threat is in the limited literature available to consult.

Furthermore, my study includes the development and administration of a questionnaire which is essential in the selection of my participants for the second phase of the research. Should the questionnaire fail in effectively identifying the resilient and less-resilient learners, all my further data will be compromised. Finally, the research questions require the participants to retrospect, thus emotions may be aroused that may cloud or affect their rational judgement during the focus groups and interviews. I will need to be sensitive to their feelings and facilitate the process in such a way as to encourage them to function beyond emotions, which might be challenging.

## **1.11 OUTLINE OF CHAPTERS**

### **Chapter One:**

The chapter has presented the purpose of the study, the research problem, the rationale of the study, the conceptual framework and the research design, perceived threats to the study and the overview of chapters.

### **Chapter Two:**

The focus will be on a literature review of what other scholars say about resilience and the school context, culminating in discussion of the conceptual framework of the study, the Resiliency Wheel and the Bio-ecological framework. The developmental phase of middle-adolescence will be looked at briefly and the context of the township school will be reviewed and related to other school contexts inside and outside South Africa.

### **Chapter Three:**

The chapter will describe Phase One of the study. It will, however, also detail the research design and other methodological aspects decided upon to explore the main research question and the sub-questions. The ethical principles of the study will also be attended to. Phase One of the data collection will address the questionnaire design, statistical analysis and selection of learners for Phase Two of the study and the analysis and interpretation of the findings in respect of the questionnaire.

### **Chapter Four:**

The chapter will describe Phase Two of the study. The chapter details the IQA process including its methodological aspects. It is a continuation from Phase One and will discuss the findings and results of the IQA process.

### **Chapter Five:**

The chapter will report on the results and findings of Chapters 3 and 4. The research frameworks of the study will be used for the final analysis and interpretation of the results. Finally the chapter will present a summary of the research, the conclusions regarding resilience theory and its application in the particular environment of the two township schools, the limitations of the study and recommendations for future research.

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## 2.1 INTRODUCTION

The research aims to understand how a black-only township high school environment influences the resilience of middle-adolescent learners. The research will help understand what it is in a black-only township high school environment that supports as well as hampers the resilience of learners. To better understand a resilience supporting school environment, it is essential to have knowledge of what resilience is and what a resilience supporting school environment relates to. The discussion on resilience will give an overview of the history of resilience research and how it has evolved over the years to what it is today. The progression of resilience research will be reviewed by looking at four different phases of resilience research, first identified by Richardson (2002:302) as the three waves of research in resilience and subsequently extended to four by Masten and Obradović (2006:14) and Masten (2007:921). The discussion on the contribution, both positive and negative, of the school environment to the resilience of learners forms the core of the chapter and the research as it relates to the research question of this study and articulates with the theoretical frameworks that direct the research.

The two theoretical frameworks of the research, the Resiliency Wheel (Henderson & Milstein 2003:12) and the Bioecological framework (Bronfenbrenner & Morris 1998) communicate effectively as they both interpret the importance of the interactive nature of the relationship between the individual and the environment. Both the environment which functions as a context for development and the individual represent systems. The person is a system and the environment (both physical and social) that the person functions in and relates to, is a system. Bronfenbrenner (1979:7) indicates that effective functioning of places or settings such as schools and families in providing an effective context for development is dependent on the nature of the social interactions that exist between the settings where the person is actively participating in the interactions. The construct 'system' refers to the context of development and study, which in this research refers to the school and the developing middle-adolescent learner who exists within the environment and all the social interactions that take place within and between them. A system is defined as a **'complex whole formed from related parts'**: a combination of related parts organized into a complex whole' or a **'whole body'**: the human or animal body as a unit' (MSN Encarta, 2007). The context of development including social interactions between all living and non-living organisms in the environment denote the interactive nature of the systems and the bidirectional relationships that exist between the systems. Bronfenbrenner (1979:20) refers to such interactive and

bidirectional relationships between the systems as representing a 'progressive mutual accommodation that exists between the actively developing individual and the changing properties of the immediate settings'. The influence and role of the black-only township environment on the resilience of the middle-adolescent learner is, from the bioecological perspective, not linear, but acknowledges the social interactions that exist between the school and the middle-adolescent learner (Bronfenbrenner 1979:5).

This chapter aims to consolidate the discussion on resilience research, followed by an analysis of one of the theoretical frameworks, the Resiliency Wheel, and its relevance to the study. The second theoretical framework, the Bioecological approach of Bronfenbrenner and Morris (1998), and its possible contribution to interpretation of the research will be considered. A brief discussion of the middle-adolescent learner as the participant of the study will be provided. In conclusion, the township and black-only high school environment will be discussed with some consideration of the learning area Life Orientation and its possible role in the resilience of learners.

## **2.2 WHAT IS RESILIENCE?**

Research indicates that the construct of resilience is context-specific (Harvey & Delfabbro 2004:5; Tusaie & Dyer 2004:6; Wilkes 2002:229; Brown, D'Emidio-Caston & Benard 2001:4; Smith 1999:156), i.e. influenced by the expected developmental tasks of the specific population group under study, where studies of infants, adolescents, families and adults adopted various methodologies to accommodate the various developmental tasks of the research participants. Resilience research includes normative expectations of adaptation and involves processes viewed in relation to patterns of child-rearing, definitions of health, healthy development and judgements of developmental outcomes of the population under study (Roosa 2000:567; Dyer & McGuinness 1999:281; Howard, Dryden & Johnson 1999:317; Smokowski, Reynolds & Bezruczko 1999:426; Rutter 1999:135; Engle, Castle & Menon 1996:627; Werner & Smith 1982:5). Thus, the individual resilience characteristics and the environmental and individual risk and protective factors that formed the initial areas of research focus in resilience study, related to the normative factors, developmental traits and attributes of the population group under study (Rutter 1999:136-137; Smokowski *et al.* 1999:427; Garmezy 1996:14; Werner 1995:82; Rutter 1990:206; Werner & Smith 1982:54-59).

The definition of resilience gives a distinction of the behaviour of an individual when confronted with adversity and denotes recoiling, leaping back or bouncing back, referring to the flexible nature of the individual to return or recover to the original form of functioning after the tension caused by the stressors (Masten 2007:923; Harper 2001a:1626). Resilience is a broad concept, which encompasses positive patterns of adaptation in the context of adversity

(Masten & Obradović 2006:14). Masten (2007:923) and Masten and Obradović (2006:14) maintain that in developmental sciences the resilience focus is mostly on individuals but, the construct is inclusive and can be applied to any functional system in which individual development takes place e.g. family and schools. Masten and Gerwartz (2006:1) indicate that resilience is a general term which requires definition and operationalisation before the researcher can study the phenomenon because of the multiple definitions of the construct, which are domain-specific and contextually operationalised by individual researchers.

Masten, Hubbard, Gest, Tellegen, Garmezy and Ramirez (1999:144), Masten and Obradović (2006:19) distinguish three forms or stages of resilience based on levels of **adversity**, **adaptation** and **competence** of the individual, namely resilient (good adaptation and high adversity history), competent (good adaptation and low adversity history) and maladaptive (poor adaptation and high adversity history). The differentiated levels of resilience further indicate the complexities encountered when defining the construct resilience. Werner (1995:81), Kinard (1998:370) and Smith (1999:157) concur that most researchers have defined the construct resilience to describe three things: '**good developmental outcomes** despite high risk status, **sustained competence** under stress and **recovery from trauma**'. Various authors refer to adversity (high risk, stress and trauma) and good development (adaptation, competence and recovery) in defining resilience, which also reiterates the formulation of bouncing back or reverting to the original form of competence. Resilience, denoting good developmental outcomes, relates to favourable developmental pathways and the expected developmental behaviours of the participants at a particular age of development (Tarter & Vanyukov 1999:94-95; Werner 1995:82; Werner & Smith 1982:5-6).

However, Olsson, Bond, Burns, Vella-Brodrick and Sawyer (2003:1) state that a lack of discrimination between the constructs of outcome and process in defining resilience is utterly confusing and can lead to 'needless complexity'. The resilience process aims to explain the existing interaction between the individual and the environmental protective factors which form part of the resilience characteristics, and the risk factors which include inhibitors or factors that threaten the resilience of the individual within the context of development. The risk factors are the stressors that are part of life and the resilient individual is able to overcome stressors and achieve healthy development. Garmezy (1996:11), Garmezy, Masten and Tellegen (1984:102), Masten (2007:923) and Werner and Smith (1982:158) refer to resilient individuals as 'stress-resistant' because of their ability to overcome adversity and demonstrate resilience in development.

The individual and environmental risk and protective factors present in the individual's life appear to be variable, normative and contextual. Consequently, a single factor can be a risk

factor in one situation and a protective factor in another, which then actually becomes beneficial to the development of the individual (Masten 1999b:288; Garmezy 1996:14; Gore & Eckenrode 1996:29; Rutter 1990:185; Werner & Smith 1982:5). Rutter (1990:184-186) states that risk factors do not have a straightforward direct effect, therefore recognising that the interactive process of risk and protective factors is essential in the resilience process. The interactive and progressive transactional process that exists between the individual and the environment and not just the individual and environmental resilience factors per se, protect against the risk factors and determine resilience (Rutter 2000:667-668; Leshner 1999:2; Werner & Smith 1982:133). The interactive process translates to the fundamental transactional process in resilience and developmental competencies, which is further reiterated by Rutter (2005:4-5) and Sameroff and Seifer (1983:1263), when they emphasise the importance of the environment in providing a unique and differentiated context in human development. Sameroff and Seifer (1983:1264) postulate that the environment is actively involved in child development and they found that *'development was the outcome of the relationship of an active organism to an active environment'*. Thus, resilience research acknowledges that the individual does not exist in a vacuum but is influenced and in turn influences the environment in which they exist.

Consequently, the construct resilience is complex, variable, dynamic, with multiple spheres of influence (domains) and it employs multiple-methodology in research (Haase 2004:290; Howard *et al.* 1999:317-318; Rutter 1999:120-121; Garmezy 1996:9-10). According to Bronfenbrenner (1974:2; 1979:22), a system is not a single and static entity, but includes physical settings, individuals, activities and reciprocal interactions. The developmental process together with the interactions that exist between individual learners and their environment constitute a system. To determine the resilience of any individual, the researcher requires knowledge of how the system in which the individual is involved functions. Masten (2007:923) and Masten and Obradović (2006:14) mention that resilience is **'inferential'** which indicates the need for deductive reasoning or interpretation when judging the resilience of an individual. Resilience is inferred from the behaviour of the individual in relation to the environmental circumstances the individual is exposed to. To determine the resilience of the individual requires an understanding and knowledge of whether they are developing as they should (functioning effectively) and essentially knowledge of the underlying or potential threats to their development and their potential to positive adaptations (Masten & Obradović 2006:14).

Not all individuals are equally 'stress-resistant' or manage to function equally effectively under adversity. Some succumb to risk and fail to develop effectively. Such individuals who struggle to cope and to demonstrate expected or 'normal' developmental goals and 'age-

salient' developmental outcomes are less-resilient. This research assumes resilience to be on a continuum, in a process of 'bouncing-**back**'. An individual, I believe, can only 'bounce-back' after an interruption of a process, a 'fall', and to regain the previous state of functioning is an active process. There is a likelihood of many 'spring-backs' contributing to the desired stage of functioning and less-resilience relates to that condition where there is no certainty or surety of bouncing all the way back. Therefore, less-resilience is not about 'falling', but about the degree and quality of getting up again. Identified 'non-resilient' children in the longitudinal research of Werner and Smith (1982:133) are described as vulnerable children who live in a persistently disordered family environment that provide little support and/or who have experienced biological insults which prevent them from experiencing successful and healthy developmental outcomes. This explanation refers to the environmental risks and adversities that hamper the capacity of the individual to be resilient. Masten (1994:4) denotes that through external behaviour good adaptation becomes competence and social adjustment, while poor adaptation refers to antisocial behaviour and maladjustment. In this study, 'less-resilient' middle-adolescent learners will refer to those individuals who struggle to cope, adapt and function effectively in their environment.

The definition of resilience constructed by the SANPAD project team and adopted for this study is a new contribution to the field of resilience research and was briefly introduced in Chapter 1 (1.5.1). The definition states that resilience is having a disposition to identify and utilize personal capacities, competencies (strengths) and assets in a specific context when faced with perceived adverse situations. The interaction between the individual and the context leads to behaviour that elicits sustained constructive outcomes that include continuous learning (growing and renewing) and flexibly negotiating the situation. The definition is deconstructed and operationalised in Chapter 3 (3.5.1) to serve as a guideline in constructing a questionnaire which will be used in Phase 1 of the study to identify resilient and less-resilient learners.

### **2.3 THE DEVELOPMENT OF RESEARCH ON RESILIENCE**

Research regarding resilience has evolved over the years from the identification of individual resilience characteristics within the person and the environment, which relates to the protective factors that serve to protect the individual from the impending risk in the environment, and risk factors that expose the individual to risk. In time, resilience research progressed to the understanding and the acknowledgement of the social interactions and the interactive nature of the relationship between the individual and the environment for resilience or less-resilience to manifest.

The foundation of research on resilience originated from the scientific fields of medicine, psychology and education in the 1960s (Masten & Gewirtz 2006:1) and in the 1970s when resilience research in the context of developmental psychopathology took centre stage (Masten & Obradović 2006:13; Masten & Powell 2003:1-2). Phillips (2008:47) and Ungar (2006:53) concur with Masten's (2001) view of resilience as the 'magic' that radiated from life yielding positive and unexpected outcomes in the face of adversity:

*The great surprise of resilience research is the ordinariness of the phenomena. Resilience does not come from rare and special qualities, but from ordinary everyday magic of ordinary, normative human resources in the minds, brains, and bodies of children, in their families and relationships, and in their communities. This has profound implications for promoting competence and human capital in individuals and society (Marshall & Benard 2003:2).*

Children who are predisposed and vulnerable to psychosocial problems and psychopathology but have against all expectations managed to succeed in life and demonstrate resilience bear testament to the magical nature of resilience in development (Masten & Reed 2005:74; Cicchetti 1990:2; Masten, Morrison, Pellegrini & Tellegen 1990:236). Research on genetics, environmental influence and behavioural outcomes of schizophrenic mothers led to unexpected results in respect of some of the offspring who, unlike their parents and siblings, became resilient in the face of adversity (Sameroff 1998:1288; Seifer, Sameroff, Dickstein, Keitner, Miller, Rasmussen & Hayden 1996:424; Garmezy 1976:3-5). The discovery of resilience characteristics in children of schizophrenic mothers indicated a move from a deficit and problem-based model to a strength-based and positive model in developmental psychopathology research.

Resilience research progressed from the emphasis on deficits and risk factors in developmental tasks versus protective factors, including epidemiology / pathogenesis versus wellness / salutogenesis in development which elucidated and illustrated a dichotomy of health / non-health in human development and a further pathogenic viewpoint that viewed health as a dichotomy rather than a continuum. The current approach to resilience research, just as the salutogenesis approach, views health as a continuum and recognises stressors as omnipresent and not as just inherently bad (Antonovsky 1987:12). Resilience research falls within the positive psychology paradigm. Positive psychology builds on the existing field of psychology which focuses on studying positive human traits and helping individuals and communities to survive and flourish with emphasis on competencies, problems and resources of the individual and the environment (Seligman 2005:8; Wright & Lopez 2005:26).

The Resilience theory has, as a result, moved increasingly away from viewing stressors and risk factors as pathogenic and requiring inoculation. Instead, the focus is now on resources (individual, context of development such as school, processes and social interactions) that can facilitate positive adaptation (Antonovsky 1987:12). Therefore, the paradigms of wellness, positive movement and the resilience theory are all closely aligned because of their strength-based approach to human development. The origins of resilience theory are aligned and founded in the acknowledgement of individual strengths and the capacity to keep rebounding, growing and developing despite the exposure to challenges and adverse conditions. Resilience viewed from a strength-based approach is therefore associated with healthy development despite risk and adversity, culminating in healthy adaptation and growth. Thomsen (2002:ix) confirms that in the absence of mitigating circumstances, almost every individual is born with the capacity and the ability to be resilient and to grow into a competent adult.

## 2.4 WAVES OF RESEARCH ON RESILIENCE DEVELOPMENT

Richardson (2002:302) best demonstrates the progression of research development in the field of resilience as he identified and documented three waves of research development that evolved in the process of resilience inquiry. The focus of research progressed from the identification of individual characteristics towards a more complex question of 'what and where' of the sources of resilience, what he (Richardson 2002:302) referred to, as the motivational energy within the individual for resilience to manifest. Masten and Obradović (2006:14) have recently added another wave of resilience research as they move towards an analysis of resilience research developments in all the disciplines of human research. In acknowledgement of the three waves of resilience posited by Richardson (2002), Masten and Obradović (2006:14) indicate that those studies ranged from various disciplines of research, e.g. psychiatry, psychology (mainly developmental and clinical) and child development and that they introduced resilience concepts and methods of study that formed the basis of the fourth wave of research. Various forms of controversies, critical comments and cautionary notes about resilience have been raised which necessitate further research into the field of resilience. Richardson's (2002) analysis of developments in resilience research does not specifically relate a progressive development of events, in that the waves of research run concurrently and not consecutively, but it gives an indication of how resilience research inclines from one form of defining resilience as mere traits to a more complex definition of its process nature.

The **first wave** of resilience inquiry is described as the phenomenological wave, which defines resilience qualities and strengths and which represents a shift from a deficit-approach in research with children towards a strength-based approach (Richardson

2002:309). The phenomenological wave is the identification wave, the ‘what wave’, that gives descriptions of resilience qualities or characteristics by defining a resilient individual (Richardson 2002:302). Margalit (2003:84) and Masten (2007:922) concur with Richardson (2002) by indicating that the first wave focuses on finding out ‘who are’ the resilient individuals and accentuates the characteristics and correlates of resilience. The product of the first wave of research in resilience is a list of individual characteristics (protective factors) identified as factors indicative of supporting resilience (Masten 2007:922). The resilience characteristics enable the individual to demonstrate the resilience response when exposed to stressors or risk and to avoid the impending state of malfunctioning, to regain or even surpass the previous state of functioning (a rebounding process) when pressure has eased or has been overcome.

According to Masten and Obradović (2006:14), the first wave of resilience research has documented the work of behavioural scientists who highlighted the significance of children who survived and developed well under harsh environmental conditions. The shortfall with the first wave of research is the expectation that protective factors alone support and influence the resilience of individuals. The expectation would include the perception that an individual found to possess resilient characteristics, including inborn traits, should demonstrate resilience throughout the developmental process. Such expectation is a fallacy, given the ordinary pressures in life which are bound to disrupt the developmental process. Every individual is bound to experience stressors and negotiate for the expected developmental outcomes. The focus of the first wave is on resilience as a trait, a mere list of characteristics that contribute to the ability of an individual to beat the odds. How the individual manages to beat the odds is not explained. Possessing particular qualities is marvelled at much more than the application of the qualities in achieving resilience. Even so, Phase One of this research will aim to identify resilient and less-resilient learners by utilising first wave properties.

The questionnaire will contain behavioural statements developed from resilience characteristics found in resilience research, that can best define and distinguish a resilient or a less-resilient individual, using their affirmation or attribution of such behaviours to themselves. In preparation for the questionnaire to be used in Phase 1 of the research, Figure 3.4 in Chapter 3 explores resilience characteristics in relation to the definition of resilience and elaborates on how the characteristics relate to resilience in individuals. However, viewing resilience as simply a demonstration of particular intrinsic and extrinsic qualities would assume that every individual in possession of such qualities is then resilient - a generalisation that fails to recognise the complexities of how resilience is achieved and

maintained in development, by disregarding and playing down the disruptive nature of stressors and adversities in life.

The **second wave** of resilience inquiry emphasises the process nature of resilience as opposed to just the trait identification approach. Richardson (2002:310-311) describes it as wanting to find out 'how' the resilience characteristics are acquired, and Masten and Obradović (2006:14) as looking at the process versus the construct nature of resilience and detailing the regulatory processes of resilience. The second wave (the 'how'-wave) defines how resilience is achieved and maintained at various phases of development (Richardson 2002:310). It cannot be assumed that any individual can, after a traumatic event, just 'bounce back' like a ball does, without even taking a moment to reflect and think about what happened. The 'how'-wave of resilience research examines how resilience happens, assuming that it is not just an automatic reaction to adversity and stressors but follows a systematic series of actions and activities. Richardson (2002:310) maintains that resilience is achieved through the process of disruption and reintegration indicating a 'way of life' where resilience relates to learned responses to life or living in order to overcome disruptions and facilitate normalcy in life.

Resilience represents an interactive process that encompasses the biological, physical and spiritual aspects of an individual, the environmental factors (exposure to opportunities, threats and protection) and the mitigating factors or activating agents (adversity, stressors or life events) which throw a person 'off balance' and compel an individual to achieve resilience as a response to dispel discomforts (Kumpfer 1999:185). Resilience requires positioning a person at equilibrium, a balanced or an OK state of functioning where disruptions are minimal or not life threatening (accepted disruptions), the perceived state of normal functioning (Richardson 2002:310-313; Kumpfer 1999:211). Richardson (2002:313) indicates that reintegration into a resilient state after exposure to adversity (a resilience process), is resilience and it means growth or adaptation through disruption, which is then much more than a general definition of recovery or bouncing back.

The active process of regaining resilience after disruptions indicates growths, development, maturity and application of skills. The disruptions change how things were, they challenge an individual to act to preserve normalcy and surpass stressors to even rise above the stressor as a victor. According to Masten and Obradović (2006:14), the second wave of research is a formidable task and is still in progress. Masten (2007:922, 927) indicates that the challenges experienced in this wave of research include waiting for resilience processes to 'kick' in naturally (i.e. without external intervention) and preventing developmental problems or disasters instead of intervening and providing support for individuals and children who are

drifting into developmental problems. Most resilience research is longitudinal, reporting on a lengthy period of observing naturally occurring resilience while in the meantime many children growing up in risk conditions, in need of intervention, are ignored (Masten 2007:922-923).

The second wave of resilience has been criticised because it requires more time and research to determine how resilience in individuals manifests. Resilience research in this wave continues the focus of the first wave by identifying the protective factors which promote resilience in individuals with the added aim of understanding ‘how’ resilience occurs, e.g. the longitudinal study of Kauai children conducted by Werner and Smith (1982) identified resilience factors, resilience building factors and how resilient individuals interact in their environment. However, the study observed the resilience process but did not discover how it manifests.

The second phase of this study uses focus groups and interviews to understand how learners view and understand the relationship between their school and their resilience. I will be investigating how the resilient and less-resilient learners define the school’s role in their resilience, how they interact with the school to maintain and grow in their resilience. The participants’ descriptions and narratives of the school’s relationship to their resilience will explain the experiences and interactions of the past, present and their perceived future. The expected results allude to the process nature of resilience as it reports on the perceived interactions, experiences and understanding of the participants in respect of their relationship with the school. In aiming to answer ‘how’ the school influences the resilience or less-resilience of learners by interpreting the perceived relationships, this study could possibly belong to the second wave of resilience research.

A quest for knowledge and understanding of ‘how’ resilience manifests, progressed to ‘what’ can be done within the process, which informed the third wave of resilience research (Masten 2007:922-923). Masten (2007:926) states that the programmes approach to supporting resilience came as a response to an urgent need to help children ‘suffering from or drifting towards environmental disasters’. Consequently, the third wave of resilience research focuses on preventative intervention while the research on ‘how’ resilience occurs continues.

The **third wave** of the resilience inquiry encompasses the ‘what and where’ of the sources of resilience (Richardson 2002:313), equated to the force of strength or energy within individuals which compels them to self-actualize, and the research aims to search for such strengths in order to nurture them (Richardson 2002:313-317). Richardson (2002:313-319)

goes deeper into various fields of study to postulate the nature of resilience e.g. philosophy, physics, psychology, Eastern medicine, neuroscience, etc. He has established that the questions ‘what and where’ of the source of resilience, are the oldest and have been the subject of lengthy research in various fields with an aim to discover the source of ‘energy’. For instance, the Physics theory of relativity and of driving forces which control the universe, are aligned to this wave of resilience research (Richardson 2002:314). These intervening forces foster and motivate an individual to want to be resilient. The external interventions include therapeutic programmes that provide protective factors in order to nurture and preserve the resilience of individuals.

Richardson’s (2002:313) focus starts with the individual’s innate abilities, the ‘what’ within the individual that forces one to be resilient, the individual’s powers to overcome stressors in order to conserve wellness rather than on an overall programme (which is outside the person). Masten (2007:923) maintains that the third wave focuses on experiments to test resilience ideas using prevention and intervention programmes with the aim of promoting wellness and preventing unhealthy development.

Somewhat in contrast to Richardson’s interpretation, Masten and Obradović (2006:14) approach the third wave of resilience research from the intervention perspective, to inform policies and programmes, aimed at promoting resilience in children and institutions that work with children. Masten’s (2007:923) focus is extrinsic to the individual, it relates to how researchers intervene, and provide ‘cushions’ or protective factors to help children in distress by designing programmes that will facilitate and support their resilience.

The third wave of resilience research takes into consideration the first two waves as it acknowledges the presence of resilience characteristics and the resilience process. The research also aims to understand the motivational force that compels the individual to be resilient. This wave in my understanding wants to find out ‘what’ makes the individual resilient and ‘where’ does this ‘what’ come from. In the process of conducting research to find the intrinsic source and motivational force behind resilience, programmes which offer support and protection extrinsically are introduced to alleviate an individual’s exposure to risk. The interventions introduced by therapeutic programmes do not interrupt research on how resilience occurs naturally, but help in speeding up the process and providing relieve to children under stressful conditions.

Masten *et al.* (1999:143-169) examined the competence of children from childhood to late adolescence, using cut-off scores to determine their state of competence, namely resilience, competence and maladaptive tendencies based on resources or protective factors and

adversity or risk factors. The findings of the study indicate the importance of protective factors in support of resilience and thus highlight the third wave's focus on injecting resources to help alleviate risk and promote resilience, including the significance of resources in determining the state of competence. Masten *et al.* (1999:145) indicate that a state of competence relates to the presence and quality of psychosocial resources, emphasizing that in most cases, good resources are less common among children growing up in the context of adversity. However, in cases where reasonably good resources are available, competence outcomes become good even in the context of chronic and severe stressors. They (Masten *et al.* 1999:145) further refer to maladaptive adolescents as often presenting with broad-based competence problems, a tendency towards being stress-reactive and a history of adversity and low resources.

South African educational policy requires schools to provide curricular programmes, e.g. on life skills, health and safety, that aim to support and empower learners to develop healthily and equip them with skills to make informed choices. The study interrogates the relationship between the resilience of learners and the school with its embedded programmes and resources. The study investigates the 'what' and the 'how' of the relationship between the school and resilient and less-resilient learners, who will be asked to relate how the school contributes to their resilience or less-resilience. The focus of the study is not on the existing programme(s) in the school and thus it might only indirectly interrogate the embedded programme(s). The data and findings will determine whether this study might be placed in the third wave of resilience research.

Masten and Obradović (2006:14) maintain that the first three waves in the resilience research highlight and focus on the behavioural aspects of children in their development of resilience. The foundation of the first three waves from different disciplines in human development has produced a vast amount of research in resilience. Masten and Obradović (2006:13) indicate that the **fourth wave** of research aims to link and integrate all the disciplines in resilience research. The rise of the fourth wave became apparent at the conference on Resilience in Children hosted by the New York Academy of Science in 2006, when scientists showed interest in integrative research (Masten 2007:925). The fourth wave, according to Masten (2007:922-923), aims to study resilience from the scientific fields of e.g. genetics, brain and development and their interplay, looks at resilience from multiple levels of functioning, and it always requires collaboration between different disciplines (Masten & Obradović 2006:23).

The fourth wave of resilience research is motivated by advancements made in the fields of technology in studying bio-behavioural processes (Masten 2007:922; Masten & Obradović

2006:23) and acknowledges the role of various disciplines in establishing the resilience link between the different fields of study (Masten 2007:925). The fourth wave is a call to coordinate the research for a better understanding of resilience research, and to link biology and neuroscience to behavioural adaptations and development resulting in an integrated and multilevel understanding of resilience in development (Masten & Obradović 2006:13). The fourth wave of resilience research promises to explicate the second wave (research on the process of resilience) through integrative research (Masten 2007:925).

The fourth wave of resilience research promises a further scientific focus on the definition of resilience, looking at how resilience will be defined and measured by e.g. a genetic scientist and a brain scientist and how risk, vulnerability and protective factors be will delineated (Masten 2007:924). Masten (2007:925) warns that to understand the process contributing to resilience is not easy and requires much work and the fourth wave will require integrative research and analysis across all levels and disciplines and that the technology involved and statistical advances will make the work feasible, but definitely not easy.

Masten (2007:927) demonstrates the importance of a multidisciplinary and collaborative approach with a functional example of what happens in a major disaster. In such instances, no individual or system functions alone, many systems collaborate and enlist the help of each other to manage the catastrophe, e.g. psychological services, computers, communication media, various ecosystems, emergency systems and health systems. This research does not focus on the fourth wave, but acknowledges that resilience is by nature systemic.

## **2.5 THE THEORETICAL FRAMEWORKS: THE RESILIENCY WHEEL AND THE BIOECOLOGICAL FRAMEWORK**

### **2.5.1 INTRODUCTION**

*Children develop in a dialectical process of meeting challenges, resolving them, and then meeting new ones. If the challenge is too severe, the developmental process breaks down. Resilience is a name for the capacity of the child to meet a challenge and use it for psychological growth (Kumpfer 1999:210-211).*

This section of the chapter aims to argue and build the theoretical frameworks that will guide this study. The research question (1.4) seeks to understand the relationship between the school and the resilience of learners. The Resiliency Wheel has been applied in school environments as a tool to help build and motivate resilience in educators, management and learners (Henderson & Milstein 2003:1-4; Thomsen 2002:3). Schools as institutions of

teaching and learning play a significant role in the development and socialisation of the individual including teaching life skills, so that Henderson and Milstein (2003:17) actually refer to schools as ‘resiliency builders’. The Resiliency Wheel is designed as a preventative programme, a response to the third wave of resilience research’s call for extrinsic resilience building resources to protect children and youth from the impending stressors and risks in the environment. The purpose of the Resiliency Wheel is to prevent unhealthy development to building resilience and to provide support to learners who are in-need of support.

My argument is that various systems, i.e. the family, the school and community institutions, e.g. religious organisations and fellowship organisations, have the responsibility to educate the children and youths towards positive and healthy development and impart life skills. The Resiliency Wheel is a programme that can be utilised by any institution working with youths and children to motivate for healthy development. As a result, it serves as a structured model in my study to guide interpretation of the data and findings of this research, in understanding what learners in a township school similarly and differently perceive important in their school environment to support their resilience.

Firstly, the resilience framework will be discussed looking at the risk mitigating factors and resilience building factors in the environment, using the Resiliency Wheel (Henderson & Milstein 2003) and subsequently, resilience will be discussed in the context of the school, positing the Resiliency Wheel within the school context. The second framework, the Bioecological framework (Bronfenbrenner & Morris 1998), will be discussed looking especially at the school system and the learner as part of the system functioning within the school.

### **2.5.2 THE RESILIENCY WHEEL FRAMEWORK**

The Resiliency Wheel is a six strategy resilience model proposed by Henderson and Milstein (2003) for the promotion of resilience within the school environment. It represents a model of care by promoting resilience in the environment and fostering resilience in individuals. The six strategies of the Resiliency Wheel (see Figure 1.1) are: Increase prosocial bonding, Set clear, consistent boundaries, Teach life skills, Provide caring and support, Set and communicate high expectations and Provide opportunities for meaningful participation.

The Resiliency Wheel can be applied to both individuals and environments to address risk factors and to help identify protective factors to support the resilience of individuals. The Resiliency Wheel is an intervention strategy that falls within the third wave of resilience research as it utilises a programme as a resource to support resilience in development. The framework is relevant to the study because it takes into cognisance the risk and protective

factors expected in the context of development and places the learner amidst the perceived school resources to encourage and promote healthy development. It further provides an intervention framework and a preventative strategy as a motivation to building resilience in the environment by providing resilience building categories or characteristics identified during the first wave of resilience research. The resilience categories listed as the strategies of the wheel are protective factors expected in an environment like the school to help learners develop healthily in spite of the presence of adversity. The Resiliency Wheel is a resiliency building tool.

This study will not use the Resiliency Wheel as a descriptive model against which the research schools must conform. In my data collection, the research question and the chosen method of study are the focus of the research and will determine the direction of the research. The findings and results of the study will then be analysed with reference to the Resiliency Wheel, to argue and build on the framework specifically for a South African township school.

The Resiliency Wheel helps to define the role the school can play in moderating the effect of risk factors and promoting resilience in learners and teachers within the school environment. The model assumes a systemic approach as it incorporates the interaction between the environmental and individual factors in promoting resilience and alleviating risk within the school environment. Henderson (1999:8) defines the Resiliency Wheel as a resiliency protection, a *'web of protection, support and nurture to facilitate each child's self-righting tendencies'*.

Thomsen (2002) applied the Resiliency Wheel in an educational environment with success to enable and motivate teachers and school administrators to use positive encouragement, recognise strengths in learners and to enhance healthy development in all learners and support them in building their resilience. The framework is used generally to encourage teachers to create an environment conducive for resilience to develop. Masten (2004:316; 1999:161) asserts that providing good resources is essential in promoting resilience in learners and that resilience can manifest even in the most adverse conditions in the presence of resources or protective factors.

Even though Masten (1999:161-162) implies that the presence of good resources motivates for resilience outcomes despite severe or chronic stressors, a conceptualisation of 'good resources' can remain contextual. The R-MATS (discussed fully in Chapter 3) has delineated some risks and protective factors viewed to be contributory towards unhealthy and healthy development specifically of township school learners. Such protective factors can attribute to

'good resources' in this study. The notion that the quality of resources is important in the resilience of learners is a further motivation for this study because what learners identify as contributory towards their resilience in the school environment should in effect be regarded important to their development. Schools are important institutions in shaping the development of future goals of learners and they contribute towards academic and cultural success of most learners. It is thus important to understand what learners perceive as important in the school environment in relation to their resilience. Such important contributory factors are contextual, specific to the learners and relate to the township school's strengths and 'good resources', weaknesses and 'bad resources' and perceived importance to the learners.

The Resiliency Wheel functions from the assumption that every learner has innate resilience or potential for resilience and in situations of less-resilience, the onus is on the environment to provide risk mitigating factors and protective factors for resilience to manifest. The Resiliency Wheel strategies comprise categories of support, care, nurturance and protection required between the individual and the environment to support resilience.

In this study, where the relationship between the school environment and the resilient and less-resilient middle-adolescent learner is investigated, the relationship between the participants and the school will encompass their perceptions about the school environment. Previous discussions on the resilience process of the second wave of research indicated that not much is known about how resilience manifests. This study does not aim to understand how the interactive processes occur but wants to understand by 'what' in the relationship and 'how' the resilience and less-resilience of learners are influenced. My assumption is that school resources, programmes, policies, characteristics and factors will be described as the 'what' that contributes to the resilience of learners and that their functions and influences as the motivating agents for the learner to want to be resilient, will answer the 'how' of the research question.

The Resiliency Wheel has been applied in educational environments, to educators and learners, and thus seems relevant and suited as a framework for understanding resilience in a school environment. The one strategy of the Resiliency Wheel, Teaching life skills, has special relevance to this study because in South Africa, life skill education is part of the curriculum, under the Life Orientation learning area. Furthermore, most life skills have been identified as characteristics of resilience and are actually used in this study, Phase 1, to design the R-MATS. The relevance of the Resiliency Wheel to this study is firstly aligned in terms of those strategies, which are incorporated in designing the questionnaire thereby

positing the profile of the participating learners and will secondly be considered as a frame of reference in interpretation of the data from Phases 1 and 2.

Research on educational resilience indicates that teachers and schools have the potential and power to impact on the resilience of learners to change their lives, influencing or hindering their resilience (Ttofa 2006:33; Bosworth & Earthman 2002:300; Thomsen 2002:9-11; Benard 1997:2). Benard (1997:1) and Thomsen (2002:12) emphasise the innate resilience of every individual when they refer to the resilient capacity each individual possesses as the 'seeds' for resilience and the power to transform and change despite the risk factors. Benard (1995:2) argues that the innate capacity for resilience enables an individual to develop resilience characteristics or protective factors like social competence and problem solving skills. Werner and Smith (1992:202) refer to this innate ability of the individual to be resilient as the 'self-righting mechanism,' a 'corrective lens that moves children towards normal adult development under all but the most adverse circumstances'. The assumption adopted by the Resiliency Wheel in positing that every learner has innate resilience is relevant to this study. I assume the less-resilient learners to be resilient, only presently less so in comparison with the resilient learners.

As stated, the Resiliency Wheel will serve as a benchmark and a base for guiding me in the interpretation and analysis of data. The position I am assuming is not to reinvent the wheel or to validate the framework, but to view and interpret the research data from the perspective and context of the participants within an existing frame of resilience research (Kumpfer 1999:212). The strengths and relevance of the Resiliency Wheel framework lies in its ability to acknowledge the presence of risk in the environment and suggest strategies that have proved essential to build and promote the resilience of learners within a school system using existing educational policies and practices. Masten (2004:316) affirms that school bonding mediates good developmental outcomes and the Resiliency Wheel strategies of promoting care, support, prosocial bonding, creating meaningful participation and setting high expectations all allude to creating meaningful relationships and bonding.

The disadvantage of choosing the Resiliency Wheel as a framework for research in a South African school is its programmatic nature. The focus of the school is to offer curricular and extra-curricular activities, which mainly include physical activities including arts and culture. Life skills offered at school are part of the formal school curriculum and, like all curricular subjects, aimed at promoting cognitive, emotional, physical and social aspects of a child's development with no extra emphasis dedicated to its relevance in building the resilience of learners. This study assumes, based on the Life Orientation programme, that learners are empowered with essential life skills which can give them the motivational energy to want to

be resilient. Another obstacle of using the Resiliency Wheel as a framework could be that not all teachers have access to the Life Orientation subject, while learners have access to many teachers in a school. Some teachers might have no regard for the strategies offered and suggested by the Resiliency Wheel. Furthermore, the motivation, depth and perceived relevance of the Life Orientation subject to healthy development by learners and teachers are essential in positioning the Life Orientation subject as a tool to help foster resilience in learners. The teachers' level of education and training and strategies used to teach life skills are important in ensuring that learners are empowered with necessary skills and protective factors to foster resilience. These factors will have to be considered in the interpretation of the data.

Henderson and Milstein (2003:14) argue that the conditions required to build resilience are the same for all learners, which makes the Resiliency Wheel as a framework for interpretation suitable to various individuals and conditions. This study uses the assumption to investigate whether resilient and less-resilient learners will require the same protective factors within a particular township school environment to foster resilience. Learners from School 1 and 2 could require similar protective factors in their school environment despite possible differences in the intensity of contextual adversity and availability of resources. In prospect, the study could presumably contribute more themes to the existing model of the Resiliency Wheel which will be identified by both resilient and less-resilient learners in their township schools.

### 2.5.3 THE SIX SEGMENTS OF THE RESILIENCY WHEEL

#### 2.5.3.1 Orientation

The Resiliency Wheel is defined by six consistent themes or strategies which Henderson and Milstein (2003:11) also refer to as the six steps in fostering resilience. The themes are grouped into two continual sections with each section consisting of three themes. For the purpose of this study, I will not refer to the Resiliency Wheel segments as steps because **steps** constitute order of occurrence, consistency, process of influence and logical progression. The Resiliency Wheel segments cannot be viewed as steps in my assumption because such strict ordinal occurrence and influence, where accomplishment of one segment leads to or influences another, is not reflected in the work of Henderson and Milstein (2003). Therefore, **strategies** will be used and not **steps**.

According to Henderson and Milstein (2003:11), the component of Mitigating risk factors in the environment is supported by research findings which originate from the risk factor research, consisting of three strategies which were found to be essential in alleviating the

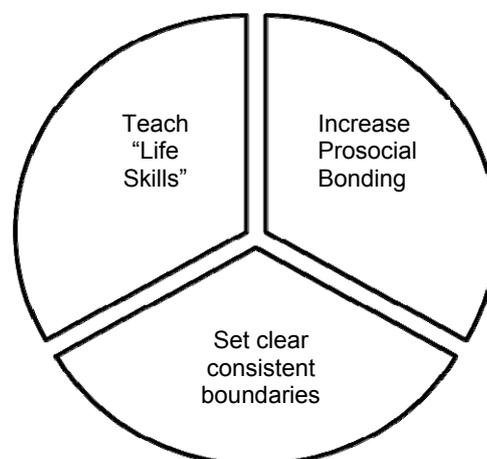
impact of risk in children and youth and setting the impetus for resilience to develop. The three strategies are indicated in the Resiliency Wheel (Figure 1.1) under the section of **Mitigating risk factors in the environment**. The other component of **Building resilience in the environment** encompasses three strategies essential for resilience to develop in the environment. The Resiliency Wheel thus encompasses functions from the risk alleviating factors and resilience building factors perspective, or the risk and protective factors perspective.

### 2.5.3.2 Mitigating risk factors in the environment

#### (1) Increase prosocial bonding

The three strategies in the component of mitigating the impact of risk in the environment, indicated in Figure 2.1, will be discussed first. The strategies are based on findings of research conducted by various resilience researchers (Ttofa 2006:35; Catalano, Berglund, Ryan, Lonczak & Hawkins 2004:106; Bosworth & Earthman 2002:300).

This strategy involves utilising the support of individual connections in the form of relations with prosocial individuals, or liking for a particular activity, to encourage strong and positive bonding. A prosocial behaviour represents actions or acts of behaviour that are deemed generally beneficial to others (Penner, Dovidio, Piliavin & Schroeder 2005:366). A prosocial individual constitutes a person who helps others, an individual who is more inclined to perform an altruistic act. The assumption is that positive bonding can be achieved with a person, object or activity. In a school environment, bonding can be achieved through learning activities and extra-curricular activities. Bosworth and Earthman (2002:301) refer to the study conducted by Werner (1995) which discovered that children's perceptions of teachers as caring adults contributed positively to their resilience.



**Figure 2.1: Mitigating risk factors in the environment**

Positive developmental outcomes and healthy interpersonal relationships are important components of a positive school climate. Schools have a positive role to play and should model positive social relationships. Similarly, in South African schools, the teacher has seven professional roles to play in education (the roles are fully discussed in section 2.6.2.4) namely, learning mediator; interpreter and designer of learning; leader, administrator and manager; scholar, researcher and lifelong learner; community, citizen and pastoral role and assessor and subject specialist (Department of Education 2000:12). The role of the teacher as a pastoral carer includes providing and developing a supportive and empowering environment for learners and responding to their educational needs (Department of Education 2000:14). The pastoral role requires the teacher to demonstrate, encourage and maintain supportive and caring relationships with all learners in school. This study assumes that every teacher in South African schools is aware of the seven roles of the teacher stipulated in the National Education Policy Act, Norms and Standards for Educators (Department of Education 2000).

## **(2) Set clear, consistent boundaries**

This strategy relates to the school's consistency in the development, interpretation and implementation of policies, especially with regard to clarification of expected behaviour of learners, and how risk behaviour is addressed within the school environment. The Department of Education expects every school to draft and adopt a policy on code of conduct as stipulated in the South African Schools Act (SASA) 84 (1996). The policy aims to establish an educational environment that caters for discipline, purpose, improvement and quality of teaching and learning. The expected behaviours, procedures, disciplinary proceedings and principles for all involved in learning and teaching, i.e. parents, teachers, learners, administrators and other school staff, are fully stipulated to protect teachers and learners and enforce a healthy teaching and learning environment. Corporal punishment, as a form of discipline is abolished from all schools in South Africa and the code of conduct must safeguard the interest of learners and all parties involved in the institution (Department of Education 1996:5).

The school is expected to enforce its code of conduct policy and to put structures in place to ensure that learners are aware of such policies, know what is expected of them and adhere to rules and regulations. Rules are important in life and guide development. Bosworth and Earthman (2002:301), assert that rules are essential in establishing logical consequence for individual behaviour. A sense of determination and potency develops in learners, youths and children who develop in environments that establish and enforce rules and structure (Bosworth & Earthman 2002:301). School rules guide, give structure and direction, set

boundaries and clear guidelines that help to limit and empower the learner in terms of what is allowed and what not.

### **(3) Teach life skills**

The strategy relates to the school curriculum. A school geared to promote resilience in learners is expected to teach the skills that feature in cooperation, healthy conflict resolution, assertiveness, communication, problem solving, decision-making and healthy stress management. The South African school curriculum includes Life Orientation, a life and social skills programme which runs across all grades. Life skills education relates to the teaching of resilience characteristics, which help the learner to effectively navigate the risks in the environment. Life skills help the learner to engage and interact effectively with adults and peers within the school environment (Henderson & Milstein 2003:13). Bosworth and Earthman (2002:301) state that many of the documented individual and intrinsic characteristics of resilience focus on social competencies, e.g. good communication skills, problem solving skills and positive self-confidence. Some skills learned in the Life Orientation curriculum have been consistently identified by resilience researchers as resilience characteristics or resilience outcomes, namely autonomy, social competence, problem solving, sense of purpose and future perspectives (Benard 1991:3-13; 1995:2). Wolin (2003:20) identified seven resilient characteristics relating to the life skills curriculum which Thomsen (2002:23), Henderson and Milstein (2003:10) and Wolin and Wolin (1993:3, 5-6) view as characteristics of the resilient individual, namely insight, independence, relationships, initiative, creativity, humour and morality. The South African Life Orientation curriculum's purpose is to assist learners 'to respond to challenges and to play an active and responsible role in the economy and society, make informed, morally responsible and accountable decisions about their health and environment' (Department of Education 2002:4). The purpose of Life Orientation builds upon some of the seven resilience characteristics identified by Wolin (2003:20).

#### **2.5.3.3 Building resilience in the environment**

The second set of strategies (Figure 2.2) in the Resiliency Wheel relates to building resilience in the environment. They consist mainly of environmental factors that are presumed 'very important' in most individuals' lives (Henderson & Milstein 2003:13; Thomsen 2002:17). The three strategies originate from consistent research findings on resilience of youths and children (Henderson & Milstein 2003; Thomsen 2002; Benard 1995 & 1991; Werner 1995; Werner & Smith 1982).



**Figure 2.2: Building resilience in the environment**

**(1) Provide caring and support**

The provision of unconditional positive regard and encouragement is regarded by Henderson and Milstein (2003) as essential in the promotion of resilience. This strategy is paramount in promoting resilience and represents a critical element in the Resiliency Wheel. To emphasize its importance, it is highlighted (Henderson & Milstein 2003:13; Thomsen 2002:4; Figures 1.1 & 2.2).

Henderson and Milstein (2003:13) posit the strategy as not only fundamental, but the most critical in overcoming adversity, indicating that it is almost impossible to overcome adversity without it. The required care and support do not necessarily come from family members, but could involve other individuals including friends, neighbours, peers, teachers, church members, etc. (Henderson & Milstein 2003:13; Werner & Smith 1982:98-99). The support provided translates to unconditional positive regard and encouragement from caring individuals (Brooks & Goldstein 2001:110). Prosocial bonding and Providing care and support are closely linked as they both relate to relationships.

Benard (1995:3) posits the strategy as a way of life that transgresses all the boundaries of care and support, a part of school ethos especially in a caring school environment and a basis for the other two strategies. Bosworth and Earthman (2002:301) explain care and support as demonstrated through a welcoming school environment, a positive connection between learners and the school, a sense of belonging, teachers' responsiveness to learners and learner's experiences of rewards and praise in school. The professional role of the teacher as a pastoral carer aligns closely to this strategy and further emphasises the importance of training teachers in South Africa to turn schools into centres of care and support for learners.

## **(2) Set and communicate high expectations**

To motivate learners and to encourage them to strive for their goals and achieve their potential, high but realistic goals and positive expectations should be articulated. Henderson and Milstein (2003:13), Benard (1995:3) and Bosworth and Earthman (2002:301) stipulate that schools that practice and encourage high expectations of learners experience a high rate of academic success and a low rate of problem behaviour (e.g. delinquency, drug problems, drop-out). Benard (1995:3) states when relationships convey a sense of worth, resilience characteristics like high expectations, future perspectives and confidence to succeed develop in learners. Krovets (1999:x, 10) argues that creating high expectations enables the learner to have future aspirations and overcome challenges. By communicating high expectations to learners, the teacher conveys confidence and trust in the learner's abilities and demonstrates awareness of the learners' talents.

A caring teacher is able to encourage and guide the learner to set high but achievable goals. One of the professional roles of the teacher is to be a subject specialist with the appropriate skills to manage and approach the subject with meticulous professionalism, which enables proper assessment of the performance and potential of the learner (Department of Education 2000:13). As a result, helping learners to set achievable goals is a skill that teachers are well equipped to address.

## **(3) Provide opportunities for meaningful participation**

This strategy promotes learner participation in school activities and decision-making. Learners are also, like adults, afforded the responsibility of participating in some of the school decision-making processes and planning activities. Benard (1995:4) indicates that providing learners with opportunities for meaningful participation is a natural progression in a school that sets and communicates high expectations and points out that the need for participation, care and respect are fundamental in human development. Benard (1995:4) further postulates that schools that fail to meet these fundamental needs alienate learners. In illustrating the importance and relevance of practicing a meaningful participation strategy, Bosworth and Earthman (2002:300) illustrate that the application of the strategy in a class of children who were failing academically, led to positive results and much improved academic achievement. The results suggest that learner involvement in school activities can lead to greater recovery in academic achievements (Bosworth & Earthman 2002:300). The South African Schools Act provides for learner participation through democratically elected structures to participate in school governance, e.g. learners from Grade 8 upwards can be elected as members of the School Governing Body to participate in drafting some of the school policies, like the code of conduct (Department of Education 1996:5, 9).

The Bioecological Model of human development which centres on the dynamic relationship that exists between a person and the environment serves as a pivotal framework to further expand on the importance of the reciprocal relationship between individuals and the environment. The framework serves to further elucidate the focus of this study, the relationship between the school environment and the learner, as it aims to recognise the possible interactive and multifaceted relationship between the school system and the learner. Together, the two research frameworks allude to the process-based nature of development and the reciprocity of interactions and the impending effect that has on the nature of development.

## 2.5.4 BIOECOLOGICAL THEORY OF HUMAN DEVELOPMENT

### 2.5.4.1 Orientation

*Human development takes place through processes of progressively more complex reciprocal interaction between an active, evolving biopsychosocial human organism and the persons, objects and symbols in its immediate external environment. To be effective, the interaction must occur on a fairly regular basis over extended periods of time (Lerner 2005:xviii, 6).*

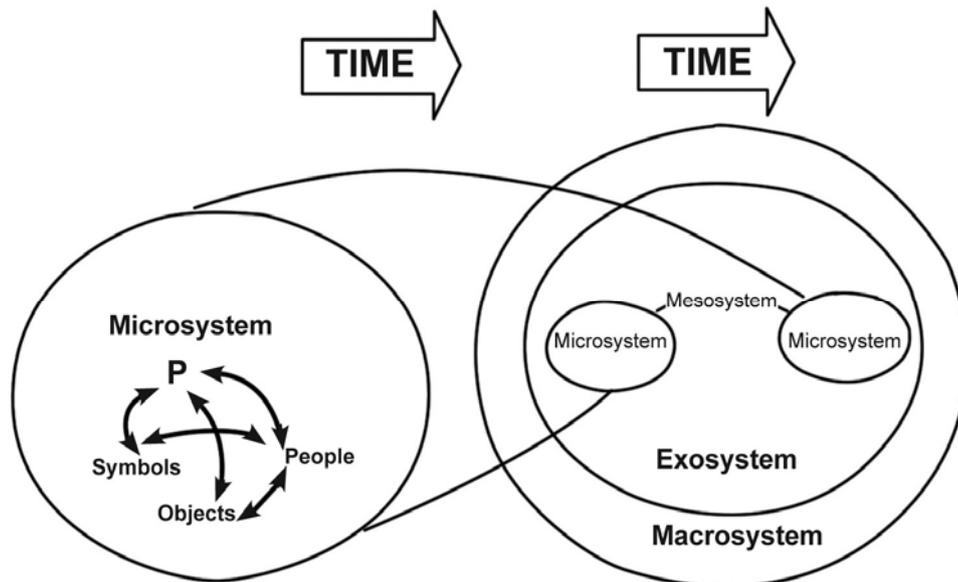
The ecological theory of human development, which has been developed into the bioecological theory of development as posited by Bronfenbrenner and Morris (1998), relates to the developing individual, the environment and the interaction between the two. The bioecological theory is positioned in the science of human development and illustrates the developmental relationship between the individual and the environment (Bronfenbrenner & Evans 2000:117, 120-121). The theory's emphasis on human development encompasses the influential aspect of genetics and environment in development, the interactive nature of intrinsic and extrinsic factors i.e. how **genotypes** are transformed into **phenotypes** (Bronfenbrenner & Evans 2000:119; Tarter, Vanyukov, Giancola, Dawes, Blackson, Mezzich & Clark 1999:658-663; Bronfenbrenner & Ceci 1994:568-570).

To incorporate the nurture and nature aspects of development, emphasis is placed on the process nature of the model denoting continuity, development over a lifetime and the reciprocal interaction between the person and the context. The principle of understanding the interaction between the individual and the environment is also reflected in the Resiliency Wheel and the resilience construct. The bioecological theory recognises the individual as both influencing and being influenced by the environment and acknowledges the active and diverse relationship that exists between the two. The symbiotic relationship between the

individual and the environment is implied in the construct bioecological, which is constituted of the biological entity, **Bio** and the environment, **Ecology**.

The bioecological model is based on a scientific study of human development and has evolved over time, as claimed by Bronfenbrenner (2005:3), when declaring that it denotes a ‘phenomenon of continuity and change in the biopsychological characteristics of human beings both as individuals and groups’. The definition acknowledges that human development is a continual and reciprocal interaction of the person and the environment in the process of growth and change characterised by progressive developmental changes and evolution over time. Bronfenbrenner and Ceci (1994:571-572) postulate that central to the bioecological model is the theoretical principle that states that developmental outcomes are a result of genetics and environmental interactions, and the proximal processes, which are explored by the PPCT Model (Tudge 2008:69).

The bioecological model is characterised by four defining properties namely, the developmental process, person, context and time (Bronfenbrenner 2005:7; Lerner 2005:xv; Bronfenbrenner & Ceci 1994:570; Bronfenbrenner & Evans 2000:117). The four defining characteristics are further presented below and illustrated in Figure 2.3, the *Process-Person-Context-Time (PPCT) Model*.



**Figure 2.3: PPCT Model** (Bronfenbrenner adapted from Tudge 2008:69)

#### 2.5.4.2 The Process

The Process is known as the proximal process and entails particular forms of interactions that exist between the individual and the environment or context. The interactions must invite the individual’s attention, exploration, manipulation, elaboration and imagination

(Bronfenbrenner 2005:7-8; Lerner 2005:xv). The proximal process is defined as regular, progressive and more complex reciprocal interaction between a living organism and the immediate environment over an extended period of time, e.g. learning new skills, problem solving, feeding a baby, caring for others, etc. (Bronfenbrenner 2005:7). Tudge (2008:68) refers to the proximal process interactions as everyday activities in which the individual participates as a way of understanding and interpreting their world. The proximal process is also referred to as the primary engine of effective development and the joint function of the individual and the environment, serving to optimise the genetic potential of the individual (Lerner 2005:8-9; Bronfenbrenner & Evans 2000:118; Bronfenbrenner 2005:6; Bronfenbrenner & Ceci 1994:572).

Figure 2.3 shows how the person (P) interacts in the microsystem with other people, objects and symbols in the proximal process. The reciprocal interactions in the immediate external environment (Microsystem) of the person (P) with objects, symbols and other persons occur on a regular basis and over an extended period of time, which is represented by the Time arrow above the figure. The bidirectional arrows between the person (P), objects, symbols and other people in the immediate environment of the microsystem include interactions that occur simultaneously or separately (Bronfenbrenner & Evans 2000:118). The proximal process which occurs in the microsystem is extended to other contexts outside the immediate influence of the person. The two lines position the proximal processes of the P with the other systems. The person still interacts with objects, symbols and people in the microsystems, for the middle-adolescent learner it would be e.g. home and school which together constituted the mesosystem. The exosystem and macrosystem containing the mesosystem and microsystem represent the influence of the environment on development and the spread of the proximal processes across time, development and systems. The P represented in the middle of the two microsystems, is greatly influenced and influences the systems, some directly and others indirectly within the developmental process. The Time arrows indicate the chronosystem which encompasses change and consistency over time across the life span and the developmental process.

The principle of proximal process is relevant to this study, which will determine whether and what relationship exists between the school environment and the resilience of the learners. The result of proximal processes is two major developmental outcomes, namely competence and dysfunction. Competence is defined as the 'acquisition and further development of knowledge, skills and ability to conduct and direct one's own behaviour across situations and developmental domains' (Bronfenbrenner & Evans 2000:118). The extreme negative end of the continuum of competence is dysfunction, which is defined as 'recurrent manifestation of difficulties in maintaining control and integration of behaviour across situations and different

domains of development' (Bronfenbrenner & Evans 2000:118). The question that Bronfenbrenner and Evans (2000:118) ask about the two outcomes of proximal process is, '**What brings about these outcomes?**' The same question is asked in the second wave of resilience research in trying to understand the resilience process. The resilience process, in accordance with the principle of proximal process, refers to competence and mal-adaptive development, where competence denotes a measure of success in achieving healthy development and mal-adaptive development relates to unhealthy developmental outcomes (Masten 1999:145).

I therefore argue that the outcome of the resilience process closely relates to a product of the proximal processes, because of the developmental outcomes and transactional characteristics of both, indicating an interactive relationship between the individual and the environment (Masten & Obradović 2006:15; Blum *et al.* 2002:29). Both the Bioecological and Resiliency Wheel frameworks function from the premise of human development, reciprocity of activity between an individual and the environment, and continuity of development over time. However, the bioecological model posits two extremes of growth and development which Bronfenbrenner and Evans (2000:118) name a **dichotomy** of behavioural outcomes, competence and dysfunction, whereas the Resiliency Wheel illustrates outcomes on a continuum: resilience which relates to good developmental outcomes and competence in development, and less-resilience which relates to poor developmental outcomes or less competence but with potential for resilience.

Middle-adolescents exist in multiple social systems (the family, school, community, etc), which interact with each other at mesosystem level on a daily basis as part of an ecological system. The social systems are interconnected, interrelated, interactive and reciprocal (Swart & Pettipher 2005:10; Bronfenbrenner 1979:18 & 21). Looking at the intensity and influence of interactions between the developing individual and the environment, Bronfenbrenner (1979:21) confirms that the child is not a tabula rasa, but a dynamic entity who also structures the living environment. Therefore, the relationship exists in the interactions. For the purpose of my study, emphasis will be placed on the school as a system of development because the influence of the school system on the resilience of the learner will be investigated.

According to Bronfenbrenner (1979:22), the microsystem is defined as '*a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics*'. The microsystem is therefore the actual environment where a person-environment interaction exists, e.g. the family, school, peers.

To answer the earlier question, '**Which aspects of proximal processes produce competence or dysfunction?**' requires looking at the exposure (measure or extent of contact) of the individual to the proximal processes in which the person engages (Bronfenbrenner & Evans 2000:118), since this is what influences the outcome of development. The exposure is measured by the duration, frequency, timing and intensity of contact maintained by the person and the proximal process (Bronfenbrenner & Evans 2000:118-119). The duration refers to the length of time and the period of exposure to the proximal processes, e.g. years of exposure and experience of violence and crime, abuse, other risk or protective factors in the environment. The frequency seeks to understand how often proximal processes occur and whether they can be measured in years, months, days, hours e.g. how often has the learner repeated a grade, does he/she fight with other learners, etc. Timing of interactions refers to the duration and moment of response to interactions, e.g. delayed or sudden response to the problem, immediate attendance to the learner's problem by the teacher. The intensity of interaction refers to the strength of exposure which can be brief, prolonged or frequent e.g. chronic abuse, sudden death of parent or significant other, continual provision of care and support. The exposure to the proximal processes and environmental conditions is important when understanding the developmental outcomes of a person.

Lerner (2005:8-9) indicates that even though the proximal processes remain the primary engine of development, there is a much greater source and force of energy that drives the engine and influences the development, namely the primary caregivers who provide **care and support** to the developing individual. The role of the primary caregivers can be provided by parents or others in the environment e.g. friends, neighbours, community members, etc. The provision of care and support by caring adults or significant others is a protective factor for resilience and constitutes one of the segments of the Resiliency Wheel.

#### **2.5.4.3 Person**

The person characteristic pertains to a developmental outcome and is one of the elements that influences the form, power, content and direction of proximal processes throughout development (Bronfenbrenner & Evans 2000:119). To assure development, the person is required to interact regularly over an extended period with the environment (Bronfenbrenner 2005:6). To ensure that a developing child, especially in the formative years, develops intellectually, emotionally, socially and morally, requires regular, consistent and progressive exposure and participation in progressively more complex activities over an extended period of time and the life-span (Lerner 2005:9). The environment has an effect on development and behaviour represents a measure and outcome of the individual's interactions and responses to a particular context. Phase 1 utilises the R-MATS, a self-report

questionnaire characterised by items designed as behavioural characteristics to identify resilient and less-resilient learners and Phase 2 seeks to understand the relationship between the school environment and the resilience of learners. I assume that learners will use observed and identified behaviours and outcomes of all role players in the school environment e.g. teachers, other school staff, peers and parents to describe the perceived relationship. Observed behaviours which are used in this study to describe perceived relationships between the resilient and less-resilient learners and their school environment is important to understand existing interactions and the resulting developmental outcomes. The proximal process which includes everyday interactions between the individual and the immediate environment incorporates the described and observed behaviours of individuals in this study. Furthermore, resilience is inferred from behaviour and a developmental outcome demonstrated in 'age-salient' developmental outcome.

Three characteristics of the Person, namely disposition or force, resources and demand, are essential in influencing the course and direction of human development. The three characteristics have an influence on the differences, the direction, power and the developmental effect of the proximal processes (Tudge 2008:70; Elliott & Tudge 2007:96; Lerner 2005:xvi-xvii; Bronfenbrenner 2005:6-7).

### **(1) Dispositions**

Disposition characteristics serve to move and maintain the proximal processes in a particular developmental domain (Lerner 2005:xvi). Tudge (2008:70) refers to force characteristics and not disposition characteristics which he relates to differences of temperament, motivation, persistence, etc. Tudge (2008:70) states that because of the force characteristics children from the same environment, e.g. family with access to same resources, can have different developmental trajectories because of their motivation and persistence in performing their duties and tasks in life. According to Swart and Pettipher (2005:14) disposition or force characteristics can influence the direction and power of proximal processes and mobilise, sustain operations, or interfere with, limit or even prevent the occurrence of proximal processes. Such disposition or force characteristics include e.g. impulsiveness, distractibility, aggressiveness, violence, shyness, etc (Swart & Pettipher 2005:14). Disposition or force characteristics in this study relates to the force within an individual that motivates them to want to succeed in life and to be resilient, this motivation cannot easily be observed in this study, but the developmental outcomes of resilience and less-resilience in learners relate to what drives the competence and maladaptive functioning of learners. The disposition or force characteristics support the energy that causes the individual to be resilient, and what the third wave of resilience research relates to.

## **(2) Bioecological Resources**

Bioecological resources are resources of ability, experiences, knowledge and skills essential for effective functioning of the proximal process at a specific phase of developmental (Lerner 2005:xvi). According to Tudge (2008:70), they partly constitute mental and emotional resources e.g. past experiences, skills, intelligence, social and material resources etc. Resources relate to the protective factors that support resilience in development most covered by the R-MATS e.g. housing, food, employment, parental care and support, educational opportunities, etc. Masten *et al.* (1999:145) refer to protective factors as resources and indicate that they play a significant role in determining the resilience of individuals. Protective factors form a cushion of protection against the impending risk factors in the environment. Resources are essential for healthy development by providing the individual with necessary support to achieve developmental tasks.

## **(3) Demand Characteristics**

Demand characteristics function to invite or discourage environmental forces that work to foster or disrupt the functions of proximal processes (Lerner 2005:xvi). The demand characteristics are essential in eliciting responses from others in the environment. Swart and Pettipher (2005:14) and Bouwer (2005:51) indicate that demand characteristics are personal characteristics that are able to provoke or discourage reactions from the environment and influences relationships with others e.g. fussy or happy baby, hyperactivity versus passivity, problem-focused, solution-focused, etc. Tudge (2008:70) refers to 'personal stimulus' characteristics because they act as an 'immediate stimulus' to another person e.g. age, gender, skin colour, physical appearance. Demand characteristics can be related to physical characteristics and observable personality traits that become apparent when people interact and can be used to describe a person. They can result in a positive or negative response from the environment. Werner and Smith (1982) found that children with good temperament e.g. smile and use sense of humour to reduce stress, cheerful, optimistic and hopeful were able to elicit good responses from adults and were well loved which was the opposite with children with bad temperament.

Finally, it is important to acknowledge that the form, power, content and direction of the proximal processes differ significantly from one individual to the other, based on the uniqueness of the individual, specific developmental outcomes and changes that occurs over time (Lerner 2005:6). Every person is unique and thus interacts with the environment differently leading to individual specific developmental outcome across life-span e.g. developmental outcomes of learners from the same school and class exposed to same external resources and risks might differ because of how they interact with the environment and their stage of maturation. The factor of time in development is represented by the

developmental changes that take place in the environment over the life-span of the individual e.g. the middle-adolescent phase.

#### 2.5.4.4 Context

Context pertains to the environment within which development occurs. Bronfenbrenner (1979:22) refers to many levels of influence in a person's environment where the individual is in the centre of all the interactive systems. The PPCT Model Figure 2.4 illustrate the Proximal Process of human development, an evolving, biospsychological human being, the Person (P) engaged in complex reciprocal interactions in the environment with people, objects and symbols, the interactions exists in all systems of development (Tudge 2008:69; Bronfenbrenner 1994:38). The Microsystem is the immediate environment where face-to-face interactions occur and where Proximal processes operates for development to occur (Bronfenbrenner 1994:39). Other systems of development's influence is illustrated by arrows indicating linkages of processes taking place as more settings are involved when more microsystems interact e.g. family and school, family and work, communities and families or schools, governments and families and communities, etc (Tudge 2008:69). The PPTC Model in Figure 2.4 clearly illustrates four systems of development within which the Person functions and exists and the fifth system is illustrated by the time arrow. The five systems are Microsystem, Mesosystem, Exosystem, Macrosystem and Chronosystem (Tudge 2008:69; Swart & Pettipher 2005:11-12; Bronfenbrenner 1979:22-26).

The **Microsystem** represents patterns of activities, roles and interpersonal relations in a given face-to-face setting e.g. home, school, peer group, workplace. The **Mesosystem** refers to linkages and processes that take place between two or more microsystems involving the developing person e.g. school and home, home and workplace, etc. The **Exosystem** denotes linkages and processes that take place between two or more settings, where one setting does not have to be a microsystem containing the developing person, but the person is affected by developments that occur in that setting. An example of the exosystem is where a child is affected by what is happening at a parent's work, a parent is affected by what is happening between the school and the community, etc. The influence on a person is indirect. The **Macrosystem** is the consistencies of the microsystems, mesosystems and exosystems that exist or could exist at a cultural level, belief systems and the underlying ideology. For instance, schools may have the same purpose of educating learners all over the world, but with basic differences characteristic to a particular country. Tudge (2008:69) explains that the macrosystem envelopes all the systems, is influenced and in-turn influences them, it is a 'context encompassing any group (culture, subculture or other extended social structures) whose members share value or belief system'. The **Chronosystem** encompasses change or consistency over time of the characteristics of a person and the environment in which a

person lives, e.g. changes in family structure, socioeconomic status, employment, place of residence etc (Bronfenbrenner 1994:40). The chronosystem represents developmental time-frames and interactions between the systems and their influence on the individual's development (Swart & Pettipher 2005:12). In human development time is measured by chronological age and the chronosystem represents time as an attribute of the developing person over the life span and a property of the surrounding environment across history (Bronfenbrenner 1994:40).

#### **2.5.4.5 Time**

Time refers to the changing social and cultural influences on development as well as the individual's developmental period within which the proximal processes are taking place. Bronfenbrenner (2005:7) states that the element of time has a special importance in development because it relates to the period of development and the changes that occur over the period of development. To show that development has occurred, there is a need to recognise an influence on the biopsychological characteristics of the developing person over the extended period or life-span (Bronfenbrenner 2005:7). Tudge (2000:3) emphasises the significance of studying development within its context and over time. Swart and Pettipher (2005:15) explain the importance, role and significance of time and its effect on society and the future through developmental outcomes and processes which can produce large scale changes over an extended period of time. They (Swart & Pettipher 2005:15) further emphasise the influence of environment in the effectiveness of proximal processes when they state that across space and time, unstable and unpredictable environments minimise the effectiveness of proximal processes. Three levels of time are identified which are microtime, mesotime and macrotime (Swart & Pettipher 2005:15). Microtime refers to continuity versus discontinuity, mesotime refers to the periodic nature of episodes over broad time intervals like days and weeks and macrotime relates to changing expectation and events in larger societies within and across generations. In this study, the concept of time is represented by the developmental phase of middle-adolescence, the grade-level of education and contexts such as the secondary school and current socio-political, socio-economic and social conditions. The Grade 9 learners are in a position to make informed decisions about their future educational prospects because it is the last grade of the compulsory education band (15 year olds) and an exit and entry point to other educational streams.

Time can also be represented in terms of e.g. hours, days, months, and time spent collecting data in schools. The school timetable permits learners to spend more than 5 hours a day at school (25+hrs a week) during the school calendar, which ensures maximum exposure to curricular activities and resources that can inform healthy development.

The PPCT Model posits the individual in a context of development and seeks to understand developmental outcomes resulting from proximal processes (Tudge 2008:69). The nature, resources and time or period of exposure to interactions influence developmental outcomes. The person, who is affected by resources and individual characteristics, is central in directing the proximal processes. This is because the person is central to his/her own development. The middle-adolescent learner, represented within the PPCT Model, constitutes the Person factor and the resilience processes (resilience and less-resilience) give inference to the proximal processes. The school forms the context of development and research and time constitutes the data collection period, phase of study and development and the school period. A township school is situated in a previously disadvantaged area, with limited resources still remaining a challenge. Masten *et al.* (1999:161) indicate that developmental outcomes relate to psychosocial resources. Their findings showed that competence relates to highly resourced conditions, and mal-adaptation to less-resourced environmental conditions.

## **2.6 THE CONTEXT OF DEVELOPMENT: THE TOWNSHIP ENVIRONMENT AND THE TOWNSHIP SCHOOL**

### **2.6.1 BACKGROUND TO THE TOWNSHIP ENVIRONMENT**

The study is conducted in Mamelodi township situated east of Pretoria (the administrative capital of South Africa), about 40kms from the city centre and on the base and lower slopes of the Magaliesberg Mountain (Potgieter 2002:45; Department of Environmental Affairs and Tourism 2000:1). Mamelodi township was originally known as Vlakfontein named after Vlakfontein 329JR farm where the first township residents were settled and the name was changed to Mamelodi in 1962 (Department of Environmental Affairs and Tourism 2000:1). The first houses to be build on the farm in June 1953 were 16 and accommodated blacks removed from Riverside, Eersterus, Eastwood and Lady Selborne (Zekeye 2004:850; Potgieter 2002:44 Mashabela 1988:104). Among the first original residents of Mamelodi were herdsmen and farmers employed in the bottle making and brick making factories of Eerste Fabrieken in Sammy Marks (Potgieter 2002:44). The name Mamelodi which means 'mother of melodies' (mother of whistles) was given to Paul Kruger by blacks because he could whistle and imitate birds (Potgieter 2002:44; Mashabela 1988:104). Mamelodi is divided into East and West by Moretele River with most residents living on both sides of the township and most informal settlements on the east side of Mamelodi (Potgieter 2002:45) where this study is being conducted. According to Potgieter (2002:45), Mamelodi is among the most densely populated and poorest residential areas in the Tshwane Metropolitan Area with 45% economically active residents. The Tshwane Metropolitan established a low-cost housing

settlement in Nellmapius south of Mamelodi to alleviate house shortage and overcrowding and to provide accommodation to low income families (Potgieter 2002:46).

Mamelodi participated significantly in the liberation struggle of South Africa and its history is characterised by political struggles and revolts against the former apartheid government. The Department of Environmental Affairs and Tourism and the Mamelodi Heritage Forum launched the Mamelodi Heritage Route at a popular venue, the Solomon Mahlangu Freedom Square on the 22<sup>nd</sup> September 2000, where the then minister of Environmental Affairs and Tourism, Vallie Moosa emphasised the historical heritage of Mamelodi. The residential places of political heroes who died during the struggle are among the tourist attractions, like Solomon Mahlangu (hanged April 6, 1979), Stanza Bopape (died 12 June 1988) and Dr. Fabian and his wife Mrs. Rubeuri (died December 1986) (Zegeye 2004:854; Department of Environmental Affairs and Tourism 2000:1). The house of Dr. Nico Smith, a minister of the Dutch Reformed Church who moved to his Mamelodi house as a demonstration against the apartheid laws of separate development and racism, is also a tourist attraction (Zegeye 2004:854; Potgieter 2002:47).

Mamelodi is known for entertainment and fun activities. Soccer is the most popular sport and Mamelodi Sundowns is a successful team from Mamelodi and by carrying the township's name, it contributes towards international exposure (Potgieter 2002:44). African jazz is a popular type of music enjoyed by festival lovers often featured at the local Moreleta Park recreational centre and world renowned jazz musicians like Don Laka and Vusi Mahlasela come from Mamelodi (Potgieter 2002:47). The township is also popular with shebeens that offer entertainment to locals with traditional food and music.

Sapire (1992:673) traces the history and origin of townships to illegal land occupation confirming that squatting is not new to South Africa, starting with the organised squatter movements, the struggle of urbanising blacks in the 1890s, to the land seizers and peri-urban settlements in the Rand during the 1940s which forced the government into destroying the illegal settlements in the 1950s. The passing of the Prevention of Illegal Squatting Act of 1952 led to construction of formal housing, now known as townships as a measure to control squatter settlements, but township dwellers continued a different form of squatting in the backyards during the 1960s and 1970s (Sapire 1992:673-675). The 1980s saw again the bold occupation of vacant lands by squatters despite the existing Prevention of Illegal Squatting Act of 1952 and by 1989 and 1990 backyard dwellers joined in the occupation of vacant land (Sapire 1992:677). Some of the reasons for the emergence of the 1980s' informal settlements in the Pretoria Witwatersrand and Vereeniging region of Gauteng include the repressive urbanisation policies, acute housing shortages, the recession and

changing conditions in former homelands and farming areas (Sapire 1992:673). Percival and Homer-Dixon (1998:289) refer to the former president of South Africa and a Nobel Peace Prize winner, Mr. F.W. de Klerk, who confirmed that the illegal occupation of vacant land by millions of black South Africans forced the apartheid government to change and not international sanctions per se, because it caused social upheaval and strained community and state institutions.

Squatting leads to destruction of the environment and forces the government to swiftly act and provide essential services to avert health problems and further environmental degradation. The illegal occupation of land and the high concentration of population on limited land destroy natural vegetation and the chances of conserving and protecting flora and fauna which might become extinct if not protected (Percival & Homer-Dixon 1998:289; Mears 1997:607). Invasions and unplanned occupation of vacant land are detrimental to the existing infrastructure and force residents to share the strained resources. The government of South Africa because of its slow progress on providing housing to multitudes of homeless people appears powerless to eradicate and stop the culture of illegal occupation of vacant land.

The illegal occupation of land occurs across South Africa, in cities and suburbs. Verster (2009:5) in the weekly suburban newspaper, *Record* (1 May 2009), confirms the continuing illegal occupations of vacant land mostly by construction workers in the eastern suburbs of Pretoria, Moreleta and Waterkloof Ridge, which have led to lengthy legal processes (Moreleta) and the degradation of natural resources, and fear of decline in the value of residential properties. It can be assumed that illegal occupation of land like in the above example is motivated by the need to reside closer to places of employment.

Mamelodi township however, has several informal settlements, some of which have been transformed into legal settlements through the housing subsidy scheme by the government's national housing programme (Huchzermeyer 2002:67). Sapire (1992:679) indicates most employed inhabitants of informal settlements occupy the lowest paying and least skilled jobs, when compared to their township counterparts. As a result, equitable sharing of scarce resources by township and informal settlement residents including social services, health and education services is essential for healthy development of all inhabitants. Schools which will participate in the research form part of the shared scarce resources and all the participating schools accommodate learners from the township's formal and informal residential areas.

In conclusion, township residential areas originated as a form of social class demarcation between blacks and whites and as low cost housing developments for black labourers to

remain closer to places of employment. Today, townships accommodate people from all socioeconomic backgrounds, but because of their historical background and the demographic distribution of the population, they have remained mainly racially segregated, almost completely occupied by black and coloured people only and are the catchment areas for the township schools. Soudien (2004:97-106) indicates that, due to demographic distribution, formerly black-only schools have remained racially segregated and the exodus of children from middle-class families to multiracial schools has left black-only schools with learners from mostly lower social class families.

## **2.6.2 THE TOWNSHIP SCHOOL**

### **2.6.2.1 Background to the township school environment**

According to Harber (2001b:261), township life has mostly been associated with violence and has occasionally been referred to as 'war zones' when the safety of residents became compromised. Therefore, most children raised in such violent environments have learned to assimilate the violence as an integral part of their lives (Harber 2001b:271). Leoschut (2006:3) defines South African society as being 'very violent', with crime and violence as 'part of routine of many youths', a view that gives a bleak definition of any country.

The National School Violence Study (NSVS 2008) conducted by the Centre for Justice and Crime Prevention in 245 South African schools, indicates that violence in schools relates to home violence and is used by most learners, as a legitimate form of resolving conflict (Burton 2008a:xi). The research (Burton 2008a) confirms the violence and crime and adverse conditions of the developmental environment facing a learner in a township school. Lubbe and Mampane (2008:136) point to a study on perceptions of safety, conducted with learners in the Limpopo province which found that most learners live in extreme fear of experiencing crime and absence of adult supervision. Xaba (2006:566) alludes to the unsafe learning environment in township schools due to their demographic location and poor resources.

To further highlight the lack of safety and impending risk factors in township schools, Zegeye (2004:870) indicates that township youth report that drugs, crime, poverty, unemployment, rape, teenage pregnancy and HIV/AIDS are among the major problems in their environment. Leoschut (2006:7) expands on contributors to youth delinquency such as exposure to violent communities and homes. Burton (2008a:xi) agrees and he affirms that school violence is linked to home and community violence and that children who experience and are exposed to crime have in most cases experienced violence before, at home or in their community. Such experiences increase the vulnerability of youths to crime and being victims of crime.

Middle-adolescent learners are part of the youth who themselves are expected to make sense of their hostile environment and to have a successful and positive future perspective.

As a result, township schools are characterised by violence and crime and exposed to adverse environmental conditions associated with low socioeconomic factors e.g. poverty and unemployment. Furthermore, it appears that most township schools struggle to access educational resources, which are essential to facilitate and create a better learning environment for the learners. The access I had to schools when planning to conduct this study made me aware that not every school in Mamelodi township is equipped with computers and have access to internet and working electricity especially in classes. Some of the school buildings require much renovation with heavy steel classroom doors without handles, broken chalk boards and cracked classroom floors. The lights in two of the classrooms I used for data collection were not working, the library with old dusty books was used as teacher's office and not opened for learners' access while computer rooms were used by Grade 12 learners and the teaching staff only. Such deprived conditions and lack of resources create disparity and magnify socioeconomic status as either a barrier or an opportunity to better education within the broader public education system of the country. The Department of Education (2008:6) confirms that progress in the equitable allocation of resources to previously disadvantaged schools is evident but 'inadequate and uneven' with 80% of school still without science laboratories and lack of computers and 68% of schools with 'inadequate classrooms leading to overcrowding in nearly a quarter of schools'.

Studies conducted by Bush and Heystek (2003:129) and Harber and Muthukrishna (2000:424) indicate that most schools in South Africa remain poorly resourced especially in townships and rural areas. I concur with the above authors' views based on this research which was conducted in two schools in a township surrounded by huge informal settlement areas with no formal housing structure. In the morning and afternoon, after school many learners from informal settlement areas are seen walking to and from schools. The housing structure in many informal settlements is characterised by a single roomed corrugated iron room which houses the whole family. Learners from the informal settlements are mostly from destitute families.

### **2.6.2.2 Socioeconomic factors in township schools**

Poverty which is a risk factor in the township school environment, can be attributed to the demographics of township settlements in this country (Prinsloo 2007:155; 2005:28). The demographic and socioeconomic distribution of townships in South Africa contributes to racially segregated settlements with scarce resources in public schools. The significance of parents' contribution to the resources of the school through school fees positions most

township schools at a disadvantage because of the socioeconomic status of township parents. Legally South African schools do not segregate learners according to colour and learning ability due to its constitution and the inclusive education policy, White Paper 6 (Department of Education 2001). As a result, former Model C schools, mostly situated in cities and suburbs, are almost fully racially integrated but township schools have remained racially segregated even after 15 years of democracy (1994-2009).

The South African Schools Act (1996) Sections 39-41 state that the School Governing Body and parents have to agree on the school fees and the School Governing Body can legally pursue school fees from paying parents should they ignore their responsibilities to pay fees (Department of Education 1996:16,17). The school fee structure is mostly associated with the socioeconomic status of parents e.g. learners from poor environments will be charged less school fees and vice versa. The school fees structure in all the school systems public and private, becomes a measure of socioeconomic status and affordability of education and as a result, access to better resources has become reliant on parental financial contributions. The socioeconomic status of parents and the school fee structure in the education system contribute effectively to the skew distribution of learners according to affordability and access to resources. Township schools as a result are much more affordable to parents with low socioeconomic status, because they charge less money in comparison to most suburban and multiracial public schools. Soudien (2004:107) declares that the socioeconomic factor applied through the school fee policy, perpetuates segregation measures by using affordability of school fees as a guiding factor and an inhibitory or exclusionary measure for parents when choosing to send a child to a particular school.

Tihanyi and Du Toit (2005:35) and Tihanyi (2007:181) also point out that school fees serve to restrict learners' access to education and opportunities. Even with the influence of the socioeconomic status of the township community, Bush and Heystek (2003:133) specify that some learners are not able to pay minimal fees due to unemployment and poverty. To support poor and unemployed families and alleviate the burden of paying school fees, the Department of Education has selected some schools in communities as no-fee paying schools. Such schools do not charge school fees as learners receive a government subsidy for their education. The two schools of research do not fall in this category.

Socioeconomic status of families is important in deciding on the school a learner will attend unless the parents are well informed about the rights of the child to education, since the South African Schools Act (1996) Section 3(a) states that no learner should be denied access to education because parents are unable to pay school fees (Department of Education 1996:4). Furthermore, the educational performance of the school can be a

motivating factor for parents to send their children to a particular school because of the annually published Grade 12 performance of learners.

### **2.6.2.3 The role of the township secondary school in influencing the resilience of learners**

The study assumes that the township secondary school plays a role in influencing the resilience and less-resilience of middle-adolescent learners. A resilient individual is seen as having the ability to recover and bounce back from adversity or harsh conditions, where the presence of adversity or harsh conditions and resources or protective factors is paramount for resilience to manifest or develop. Masten and Obradović (2006:14) in their definition of resilience allude to two factors, positive patterns of adaptation and adversity, i.e. developmental outcomes and risk. This is one of the directions of this study. Identifying resilient and less-resilient learners in Phase 1 of the study and the township school with its historical background of adversity allude to the two factors i.e. competence outcomes and adverse context. Activities and interactions between learners and other stakeholders in a school environment fall in the category of proximal processes and the school provides the environment for learners to explore, manipulate facts and knowledge, attend to new experiences, dream and use their imagination in structured activities to develop and aim for future goals (Lerner 2005:xv; Bronfenbrenner 2005:6). The perceived proximal processes existing between learners and the township school environment will be interrogated, explored, related and discussed in Chapter 4. The perceived relationships between learners and the school are stories of resilience, based on competence in developmental outcomes or less-resilience, based on maladjustment in developmental outcomes.

Masten and Obradović (2006:14) specify that to determine the resilience of any system or sub-system requires knowledge and understanding of the following factors about the system:

- Whether the system is doing what it is supposed to be doing (here the role of the school as an institution of teaching and learning is important. Chapters 4 and 5 will highlight the role the school plays in the resilience of learners in the interpretation of findings)
- Understanding the underlying threats or potential risks to positive adaptations of the system e.g. existing risk factors and protective factors (Chapter 4 aims to elucidate the perceived protective and risk factors between the school and learners in their interrogation of the research question)
- Understanding and judgement of potentials to positive adaptations and significant threats to positive adaptations of the system (the perceived relationship between the school and learners alludes to how it influences the resilience of learners; this is discussed in detail in Chapters 4 and 5).

Furthermore, the school plays a supportive role in the resilience of learners with its curricular activities. According to educational research in resilience (Thomsen 2002:4-5), teaching life skills in schools is essential in supporting the resilience of learners. In South Africa, the life skill programme is encompassed in the Life Orientation curriculum.

The Life Orientation curriculum focuses on holistic development of the learner, i.e. social, personal, emotional, cognitive and physical development and how these facets of development interact to facilitate positive and healthy development (Department of Education 2002:4). The Life Orientation programme centres on helping learners to develop skills, knowledge, values and attitudes that empower them to make informed decisions and to act appropriately (Department of Education 2002:4). Life skills learned through the Life Orientation programme have been identified as building blocks or characteristics of resilience in most resilience literature (Benard 2004:32; Thomsen 2002:37; Brooks & Goldstein 2001:13; Krovetz 1999:vii; Kumpfer 1999:198; Joseph 1994:32; Werner & Smith 1982:57). Some of the resilience characteristics which have been identified in resilient individuals, e.g. problem solving skills, positive self-concept and self-awareness, form a component of the Life Orientation curriculum under the focus of personal development. Some of the resilience characteristics are fully discussed in Chapter 3 under questionnaire design.

According to the Department of Education (2002:4), the Life Orientation programme proposes to guide and prepare learners for life, to equip them for meaningful and successful living and development in their environment and empower them to discover and use their talents to achieve to the best of their abilities and to contribute meaningfully in their environment (family, school and community). The school therefore provides learners with training, skills, knowledge and the opportunity for healthy and positive development through programmes that empower them to respond to challenges and rebound from adverse environmental conditions.

Other structures within the school system that serve to support the resilience of learners include school policies, staff, parents and learners and supportive interactions. The vision, mission and motto (which serve to unite and build pride in learners) of the school become a unique measure of the school that helps learners to identify with the school. The school also helps to promote order, responsibility, values and attitudes by enforcing rules, regulations and a code of conduct that creates a contract between parents, learners, teachers, management and other school staff. Establishing proper and effective channels of communication enables all parties to have equitable access to information and proper conflict resolution structures. Such communications in a school environment are convened through meetings of all stakeholders (Department of Education 1996:9). Through its policies, the

supportive school will create opportunities and an enabling environment for learners and educators to function effectively, and strategies to minimise and tackle emerging and existing problems, challenges and obstacles.

According to Wang, Haertel and Walberg (1994:49-51), schools that support the resilience of learners are effective schools and have the following criteria:

- Set clearly defined boundaries. Communicate clear rules and regulations and disciplinary procedures. The code of conduct of the school aims to set clear and definite boundaries about the expected behaviour and the disciplinary procedures to be followed in accordance with the policy. The Resiliency Wheel strategy, Set clear, consistent boundaries, alludes to the importance of ensuring that learners know the expected behaviour in the school environment and understand what incentives and disciplinary measures are in place when required.
- Help learners to develop their communication skills. Communication skills are life skills and fall in the Teach life skills segment of the Resiliency Wheel. The Life Orientation programme offered at schools as part of the formal curriculum offers life skills to learners. Communication is essential to enable learners to voice their concerns, to seek clarity in areas of learning difficulty, form social relations and negotiate support and care from others in the environment. Learners who are able to communicate their concerns, verbally and or non-verbally, have a chance to be heard and attended to, unlike learners who fail to communicate their concerns.
- Encourage learners to achieve to the best of their abilities, e.g. encourage them to study and do their schoolwork. The segment of the Resiliency Wheel, Set and communicate high expectations, alludes to this strategy. To motivate learners to achieve according to their ability is important in education because it communicates confidence and acknowledges the learners' ability to achieve and succeed if they try harder.
- Encourage close working relations between students and teachers and discourage an environment of anonymity. This criterion aligns to the strategy Increase prosocial bonding of the Resiliency Wheel. A good working relationship of respect is important between teachers and learners to ensure good management of teaching and learning and to allow learners access to teachers when needing guidance.
- Provide programmes that encourage learners to take responsibility for helping each other to learn and to ensure that there is a friendly school environment e.g. good peer relationships. The Resiliency Wheel segment, Provide caring and support, is about encouragement, positive relationships, caring and support and positive connections between learners and staff. A supportive school, according to Wang *et*

*al.* (1994:53), has high expectations of their learners. Teachers at a school that supports the resilience of learners are encouraged to help learners to develop values and attitudes necessary for persevering at school and achieving to the best of their abilities. Such teachers are effective in creating an enabling and supportive environment for learners to achieve their educational goals and social skills (Wang *et al.* 1994:60). According to Wang *et al.* (1994:60), effective teaching and teachers help to reduce vulnerability and stress levels of learners by using various strategies to ensure personal and academic competence of learners. In describing supportive teachers, Freiberg (1994:153) indicates that such teachers relate to their learners, they tend to help rather than push, they recognise and acknowledge the presence of learners mostly by greeting them and finding out and showing interest in how the learners are doing (their wellbeing).

In conclusion, for a school to succeed in effectively supporting the resilience of its learners, it requires good and effective implementation of school policies, commitment of all staff, learners, parents, and good management skills, and efficient resources to function effectively, and supportive and good working relationships of all stakeholders (parents, learners, teachers, school management staff and other staff members). A school in a township environment has the potential of being effective in supporting the resilience of learners. The South African Schools Act, 84 (1996) guides schools on how to function effectively and to implement laws essential for whole school development, including, the training of staff and stakeholders, i.e. school principals, teachers and support staff, learners and parents. To interpret and apply policy is paramount to creating a safe school environment, and one of the 7 professional roles of the teacher, the Community, citizenship and pastoral role, alludes to promoting a supportive school environment.

#### **2.6.2.4 The role of the teacher in supporting the resilience of learners**

Although township schools are experiencing risk and adversity, many schools continue to produce good academic results. The former premier of Gauteng Province Mr. Mbhazima Shilowa praised and acknowledged schools that produced good Grade 12 results (Government Communication and Information System, 3 January 2008; 22 March 2007; Gauteng Provincial Government, 24 March 2007). Successful and progressive township schools have emerged over the years because of a good culture of teaching and learning and school management. Teachers employed in township schools are qualified professionals as stated in the Norms and Standards of Educators policy (Department of Education 2000) and are central to the successful performance of learners in schools.

According to the Norms and Standards of Educators, the seven roles of the teacher and the associated competences are norms for teacher or educator development and central to their qualification (Department of Education 2000:12). The seventh role, of education specialist, is an overarching role on which the qualification is designed and it includes other roles (Department of Education 2000:12). Furthermore, the roles are essential in developing and distinguishing the profession of teaching. A brief description of each role follows below with an example to illustrate how the role can be operationalised by teachers (Department of Education 2000:12-22).

- 1) Learning mediator, the educator will mediate learning in a manner sensitive to the diverse needs of learners, communicate effectively and show respect and recognition for differences in others, e.g. create a learning environment in which creative thinking is encouraged, use media and other resources, adapt teaching to the developmental stage of learners etc.
- 2) Interpreter and designer of learning programmes and materials, the educator will understand, interpret and design learning programmes to accommodate the diverse needs of learners, e.g. design learning resources, select resources suitable for the developmental stage of learners, use learner feedback to assess learning.
- 3) Leader, administrator and manager, the educator will make decisions appropriate to the level of learners and manage learning in the classroom, e.g. manage classroom teaching, resolve conflicts in the classroom etc.
- 4) Community, citizenship and pastoral agent, the educator will promote a critical, committed and ethical attitude towards developing a sense of respect and responsibility towards others. A competent teacher will, according to the Department of Education (2000:18-19), be able to perform the following:
  - develop life skills, work-skills, a critical, ethical and committed political attitude and healthy lifestyle to learners;
  - provide guidance to learners about work and study possibilities;
  - respond to current social and educational problems with particular emphasis on violence, drug abuse, poverty, child and women abuse;
  - counsel and / or tutor learners in need of assistance with social or learning problems; demonstrate caring, committed and professional behaviour, protection of learners / children and the development of the whole person; conceptualise and plan the school extra-mural programme including sport, artistic and cultural activities; operate as a mentor and provide mentoring support to student educators and colleagues.

This role is paramount to providing care and support to learners exposed to harsh and adverse conditions and becomes the strength of the school. Furthermore,

teachers have a responsibility to ensure the safety of learners in school both in their role as secondary educators and *in loco parentis* (Prinsloo 2005:7). The section of the Resiliency Wheel, Provide care and support, aligns closely to this role.

- 5) Scholar, researcher and lifelong learner, the educator will achieve ongoing personal, academic, professional and occupational growth, e.g. show interest in current affairs, use technology and media to research and access resources and critically analyse the school curriculum.
- 6) Assessor, the educator will understand that assessment is essential for teaching and learning processes, e.g. provide feedback to learners in a sensitive and educationally helpful way, report on academic progress and use assessment effectively.
- 7) Learning area / subject / discipline / phase specialist, the educator will be grounded in knowledge, skills, values, principles, methods and procedures relevant to the discipline and subject.

The school is designed with policies in mind to protect, care for and support the healthy development in learners. Much of the responsibility lies in the implementation of policies and success in achieving desired goals of effective teaching and learning. A good and effective school serves as a safety net for learners and presents them with options of care and support. The role of the teacher is thus central to ensuring that effective learning takes place and schools are centres of care and support to learners. Teachers are central to teaching and learning; they interpret the curriculum and present learning to learners in a language that is at their level of development and understanding. As assessors, they are able to determine the academic, cultural and social competence of learners and can help learners to work on their weaknesses and strengths to achieve competence in their learning. Teachers are fundamental to successful teaching and learning, they manage classrooms, and curriculum and can serve as good role models to learners. A supportive and caring teacher who adheres to all the seven professional roles is a valuable resource to the school, community and learners.

## **2.7 ADOLESCENT STAGE**

### **2.7.1 ORIENTATION**

The developmental stage of adolescence begins at the onset of puberty and extends through to the teenage period and is characterised by rapid physical growth, social, emotional and physiological changes and a search for identity (who am I?) (Carr-Gregg & Shale 2002:32; Lerner & Galambos 1998:415; Mwamwenda 1996:63; Gillis 1994:70). In certain cultural

practices in South Africa, the adolescent stage is a period for undergoing circumcision, initiations, tests for bravery (manhood and womanhood) and for celebrating and attending to the special status of adolescence (Mampane 2004:39-40; Mwamwenda 1996:63). Lerner and Galambos (1998:416) state that adolescence occurs at multilevel contexts because it involves connections between biological, cognitive, physiological and socio-cultural factors and emphasises that no single influence acts alone, there is interaction and reciprocity of interconnection in the development. The context of development and experiential factors are important in influencing the cognitive development of adolescents (Lerner & Galambos 1998:416) and in a township school environment this factor is important to consider in this developmental stage of uncertainty and transitions.

The adolescent stage is long, extending from 12years- 20years and is divided into three stages with a characteristic question for each stage: puberty or early adolescence (Am I normal?), middle-adolescence (Who am I?) and late-adolescence (What is my place in the world?) (Carr-Gregg & Shale 2002:2; Gillis 1994:70-71). However, Gillis (1994:71) warns against compartmentalising the developmental stages, he regards the stage as a continuum because the adolescents 'move back and forth between the stages'. Therefore, the focus should be placed on the child and success in the resolution of the earlier stage, where the child is progressing from. This study's focus on middle-adolescence is based on the age and grade of the learner (15), which fully place the learner into this developmental phase. I am cognisant of the developmental challenges of progressing from childhood to adulthood by the middle-adolescent learner.

Adolescence is a developmental stage characterised by developmental changes and transitions, and a period to celebrate and be involved in experimentation and to some learners it is a break with the past and involvement with the future e.g. transition from primary school to high school, and in late adolescence from school to work (Lerner & Galambos 1998:414; Gillis 1994:67). As adolescents experiment with their newly found knowledge in their cognitive, emotional, physical and social facets, adults in their midst might interpret some developmental behaviours to be deviant and problematic. However, such experimentations are characteristic of the developmental phase (Carr-Gregg & Shale 2002:44; Gillis 1994:67). Social environment plays a significant role in the development of the adolescent. Changes, expectations and environmental demands presented by family, school and society affect the development and maturation of the adolescent. Adolescents are, however, expected to cope with the demands and challenges in the environment and to adapt to their new roles in society and family. According to Roux (1997:34), adolescents in South Africa are concerned about the 'physical, relational, social and cultural contexts of the education situation in which they find themselves'. It is my assumption that these concerns

are still relevant in 2009 because of the environmental conditions learners find themselves in, e.g. crime, violence and educational transitions. Roux (1997:42) states that white South African adolescents voiced their concern on their role in the new South Africa in relation to other race groups. This concern in my opinion is shared by all adolescents in South Africa because it forces them to search for their contribution in the country and their future perspectives and, especially with unemployment and policies on equity, most learners are worried about their chances of a better future. The concern about physical environment in the study of Roux (1997:40) refers mostly to global issues and conservation of the environment (pollution, depletion of the ozone layer) and socially responsible behaviour and morality, e.g. caring for animals. However, in a township environment adolescents might also refer to environmental concerns with a different focus, e.g. pollution due to littering and lack of space due to congestion.

### **2.7.2 MIDDLE-ADOLESCENCE**

Middle-adolescence begins at ±14-16 years, in their transitional period towards adulthood. The middle-adolescent is in-between childhood and adulthood at the 'crossover period' and their motto is 'I am almost grown-up, but I still need answers to a great many questions'. Lerner and Galambos (1998:417) refer to individual differences and diversity in adolescents and multiple pathways in this developmental stage when they state that normal adolescent developments are variable because of e.g. diversity between cultures and temperamental characteristics like mood swings, and such differences impact on developmental outcomes of the adolescent. Lerner and Galambos (1998:417) state that in adolescent development inter-individual (between-persons) differences and intra-individual (within-person) changes are 'rule' and thus generalisations that exclude class, race or ethnicity of the individual are not useful. This indicates the relevance of environmental and group parameters when working with a group of learners in this developmental stage.

Gillis (1994:73) states that middle-adolescence is a time to experiment and acquire new skills, where experimentation involves feelings of ambivalence and insecurity and the following characteristics are attributed to the middle-adolescent learner:

- Physical growth: complexities in body changes
- Sex drive: interest in opposite sex relationships
- Thinking: ability to hypothesise and deal with abstract concepts, introspection, self-analysis
- Family relationships: the family remain the basis of support and control but the school is also the environment of development
- Peer relationships: more time is spent at school than at home and peer and mutual interest groups begin to replace family in supportive roles

- Egocentricity: there is allowance for different perspectives and awareness and sensitivity to the opinions of others

Middle-adolescence is a stage of self-discovery and exploration and puts a learner in a position to search for answers. The energy and motivation to search is inherent in the developmental stage, they need to discover the environment and find solutions and answers to the questions they have. As a developing adult, the middle-adolescent requires guidance, support and structure to successfully navigate the environment and achieve the required developmental milestones. The search can produce good and bad results, competent and maladaptive outcomes depending on the individual and environmental factors. Life skills, adult and peer support and other forms of protection (protective factors) are essential in helping the middle-adolescent succeed in the search and journey to adulthood. The school is one of the environments of learning where such skills are learned. The learning area of Life Orientation is structured to suite learners according to their developmental needs (in terms of grade specification) and to effect healthy development in totality.

In conclusion, middle-adolescence as a developmental stage is also characterised by risk factors, as adolescence marks a transitional period between childhood and adulthood where identity formation develops and can include periods of confusion and risk taking. The challenges characteristic of this stage often include an identity crisis, which adds further stress for learners as they try to find and understand who they are in an environment which frequently appears to be hostile and unsupportive to their developmental needs. The role of the school is fundamental in ameliorating environmental risk and accentuating the strengths of the learners through various programmes, curricular and extracurricular activities to encourage resilience. The township secondary school is fundamental in helping to define the future of middle-adolescent learners in a township environment. Even with the emergence of threats to positive development in the township environment, a skewed distribution of resources and poor social and economic factors, protective factors do exist in schools. The research question aims to find out 'what is it' in the school environment that supports resilience (protective factors) or less-resilience (risk factors) of learners.

## **2.8 CONCLUSION**

This chapter introduced and discussed lengthily the origins of the construct resilience, and the research conducted on resilience leading to identification of the four waves of resilience research. The definition of resilience, constructed by the SANPAD Project team, which is a new contribution to the field of resilience and findings from the first wave of resilience research were operationalised and deconstructed to construct a Likert-type scale questionnaire to be used in Phase 1 of this study to identify resilient and less-resilient middle-

adolescent learners. The construct resilience constitutes bouncing back and showing developmental competence in the context of adversity, and thus acknowledges resources, risk, development, person-context interaction and successful development versus maladjustment (should the learner be less-resilient). Competence in development also denotes successful accomplishment of 'age-salient' developmental tasks leading to healthy development and less-resilience denotes problems in adaptation leading to unhealthy development. Resilient individuals are characterised by having or being able to access resilience characteristics which are assets, protective factors or resources internal and external to the individual. Some resilience characteristics were identified and used to construct the questionnaire for this study.

The resilience theoretical framework, the Resiliency Wheel, is used to elucidate how resilience manifests or is demonstrated in the school environment and how to identify resilience in learners. The Resiliency Wheel can also play a supportive role in building resilience in learners and the school environment. The school environment constitutes a microsystem, the environment where face-to-face interactions occur. The role of the Resiliency Wheel in this study, as a framework of reference, was discussed to ensure that the research question remain the focus of the research.

The second theoretical framework of the study, the Bioecological theory which addresses all levels of interactions between the person and the environment from the immediate microsystem to the highest level of interaction in the macrosystem, and the PPCT Model and its relevance to the study was discussed. The proximal processes constitute reciprocal interactions that occur on a regular basis between the person with objects, symbols and other persons in the environment over an extended period of time. The proximal process can lead to competence as well as dysfunction. Constructive proximal processes in this study relate to resilience or success in accomplishing 'age-salient' developmental tasks and thus maintaining healthy development over one's life course and dysfunctional proximal processes relate to less-resilience or maladjustment in development. The person constitutes the middle-adolescent learner who interacts continually and reciprocally with other learners, teachers, school policies and other subjects and symbols within the school environment. The context is the school environment, which is the focus of the study. The chronosystem is represented by Time in the PPCT Model and is reflected in transition over the life course (middle-adolescence), and the social and cultural circumstances (the effects of environmental circumstances over time e.g. crime, poverty, school failure).

In conclusion, the theoretical frameworks, the Resiliency Wheel and the Bioecological framework emphasise the relevance of person-context interactions. The two frameworks acknowledge the importance of resources and the presence of risk in the interactions. The



proximal processes, everyday activities and joint functions of the individual and the environment (Tudge 2008:68) define these interactions. The outcome of proximal processes can be either competence in achieving healthy development or maladjustment when unhealthy development occurs. Such outcomes can either demonstrate resilience or less-resilience in development. The individual learner, who is the focus of this study, can demonstrate competence or maladjustment in their relationships with the school.

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