

**THE APPRAISAL AND ENHANCEMENT OF  
RESILIENCE MODALITIES IN MIDDLE  
ADOLESCENTS WITHIN THE SCHOOL  
CONTEXT**

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**The appraisal and enhancement of resilience  
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context**

**by**

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*This study is dedicated to my Heavenly Father; make the work of my hands a lovely blessing to bring honour to the King.*

I WOULD LIKE TO EXPRESS MY SINCERE GRATITUDE TO:

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I declare that: “The appraisal and enhancement of resilience modalities in middle adolescents within the school context” is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Miss. L. Kruger

## **Synopsis**

South African middle adolescents are exposed to environments riddled with potential adversities which are pervading into their lives, adding to their challenges inherent to their developmental stage. Resilient behaviour requires changes with each developmental phase and varies on a continuum of less optimum resilience to optimum resilience based on the middle adolescent's developed modalities. Middle adolescents spend a significant time in school and therefore it is an appropriate context to foster, enhance and develop emotional-, social- and cognitive resilience competencies. There are limited psychological assessment instruments for the South African population that can be used to appraise the level of resilience modalities in middle adolescents as well as ways of enhancing and developing these resilience modalities in the school context. The aim of this ethnographic study is to describe and explore the process of how to appraise, develop and enhance the modalities of resilience of the South African middle adolescent in the school context. The research is conducted from a combined qualitative and quantitative approach which is seen as complementary to each other in a dominant-less-dominant model. The purposeful sampling consists of thirty 14-year old heterogeneous and multi-cultural participants in a private inner-city school. The data collecting strategies comprise of an open-ended question, observations and the newly developed Resilience Enhancement Kit and the Resiliency Scale. The gender specific results regarding the middle adolescents' responses in the pre- and post tests (Resiliency Scale) after administering the Resilience Enhancement Kit indicated that there was an increase in their level of resilient functioning and therefore appears to be successful in enhancing resilience modalities. There is a discrepancy in the perception of teachers and middle adolescents' regarding their resilient functioning. It is recommended that Educational Psychologists train teachers in administering the Resiliency Enhancement Kit and scale to incorporate it in the school curriculum.

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**List of key words**

- ☞ Resilience
- ☞ Rebound
- ☞ Bouncing back
- ☞ Middle adolescents
- ☞ School context
- ☞ Educational Psychological appraisal
- ☞ Modalities
- ☞ Emotional competence
- ☞ Social competence
- ☞ Cognitive competence

## CHAPTER 1

### Introduction, problem statement, aim, methodology and programme of research

*"Resiliency is the happy knack of being able to bungy jump through the pitfalls of life, armed to rebound when things get low to maintain a sense of who you are as a person"*

*(Fuller, 2001:40)*

#### **1.1. INTRODUCTION**

South Africa is a country rich in historical, cultural, linguistic and ethnic diversity as well as different socio-economic rankings. In recent times, there has been a growing trend towards cultivating these diversities, focusing on the strengths of middle adolescents' functioning within their various ecosystems and uplifting the community as part of the African Renaissance. The paradoxical ambience and political, economic and social condition that are currently being experienced in the country was created by the rapid changes since 1994, when South Africa obtained a new democracy. These changes have had an enormous impact on the community. There has been a wealth of new opportunities for development in all sectors, but it also brings various stressors of a changing society. These changes are also pervading into the lives of the middle adolescents, who are already challenged by the physical, cognitive, affective, social, emotional and aesthetic changes inherent to their developmental stage. Donald, Lazarus and Lolwana (1997:15) quote Burman, Reynolds, Dawes and Donald who are of the opinion that: *"the challenges that South Africa faces encompasses the full extent of social reconstruction. All the issues resulting thereof has significant effects on the development of children and the development of the contextual disadvantaged, social problems and special needs"*. This view reiterates the importance that the social context plays in influencing the middle adolescents' life and their ability to bounce back against the changes and challenges of living in a diverse society. The middle adolescents function within an ecosystem that

includes the family, school, community and society as a whole, which is linked in a dynamic, interdependent and interacting relationship and therefore the role they play in the wellbeing of middle adolescents needs to be taken into consideration.

The National Commission on special needs in education and training in association with the National Committee on support services (1997:12) compiled essential changes and barriers to learning and development with which the South African middle adolescent is currently being challenged in their various social contexts. The first is in the socio-economic sphere that includes urban and rural disparities, the level of access to basic services, poverty and underdevelopment, all forms of abuse, discrimination, stigmatisation and the lack of a supportive infrastructure, violence and crime as well as sickness such as human immunosuppressive virus (HIV) and (acquired immune deficiency syndrome (AIDS)). The second change is in the nature of the school curriculum, parental involvement in the learning process as well as views on disabilities. A change in legislation, policies and support services, which focuses on children and adolescents' rights, can also have a great influence on them. Global changes resulting in technological advancements and faster information processing are also placing increasing pressure on today's middle adolescents to mature at a faster rate than was the case in previous generations. The above-mentioned changes and barriers could affect the middle adolescent's wellbeing. Due to differences and levels of regulatory skills (resiliency), changes can have a positive or negative influence on a middle adolescent. Benard (1995:1) is of opinion that all middle adolescents are born with an innate capacity to successfully overcome life's difficulties, in other words to be resilient. Therefore, if middle adolescents have the capacity to become resilient it is the role of the significant role players in the middle adolescents' contexts to be involved in developing, enhancing and fostering resilience in the youth.

Resilience can be seen as the capability of middle adolescents and ecosystems (family, school, community or society) to cope and rebound (bounce back) in the face of significant adversity, risk, trauma or stress. This concept is reiterated by Benard's (1997:2) definition of resilience which she states as follows: "*resilience is an accumulating matrix of capacities, resources, strengths, knowledge and adaptive skills that continues to grow over time, which equips an adolescent to cope despite personal vulnerabilities and adversities brought about by environmental conditions*". This implies that resilience develops through gradual exposure to difficulties and stresses at a manageable level of intensity. As mentioned previously, South African middle adolescents are exposed to numerous environments riddled with potential risks and problems. Psychological services responding to these middle adolescents have often functioned within a deficit model where a problem first has to arise and then rectification and rehabilitation of inharmonious relationships can begin.

Due to this deficit model the recognition of middle adolescents' capacities and strengths are not always utilized to guide the middle adolescent to optimal wellbeing. The essential tasks of Educational Psychology must therefore focus on prevention that takes into account the middle adolescents' developmental phase and not just rectification and rehabilitation of inharmonious relationships within the ecosystemic context. A paradigm shift is necessary to focus on the middle adolescent's strengths and assets. Adhering to, and focusing on, the middle adolescent's anthropological essences will foster the transition. One significant anthropological essence includes knowing that the middle adolescent is unique with immense potential for development. The asset-based approach displaces the emphasis on the deficits and weaknesses because it focuses on the assets, strengths and capacities found in the individual and social context. The asset-based approach therefore include a strong focus on the present assets and strengths of the middle adolescent, a belief in active participation of middle adolescents in their own wellbeing as well as an emphasis on creating auspicious relationships that can motivate the middle adolescent to address



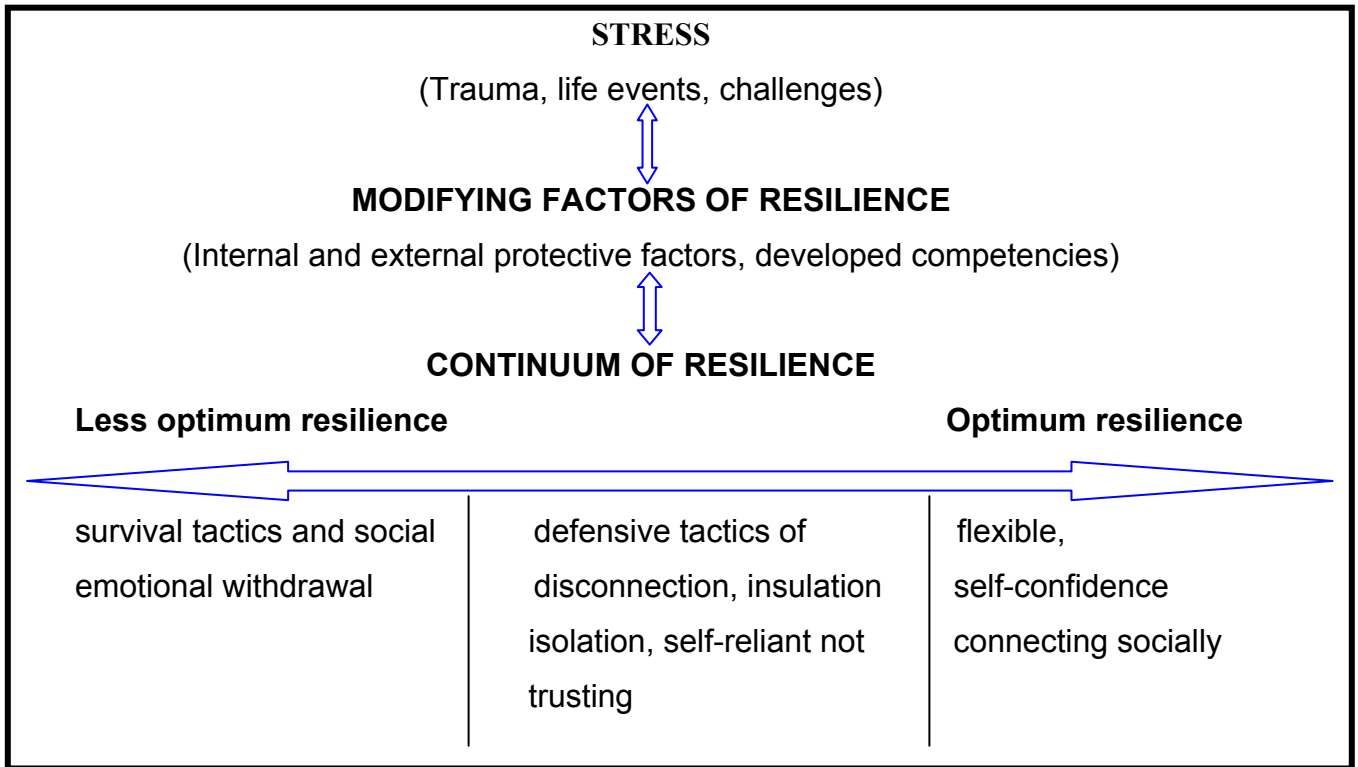
barriers and needs in their lives. Ebersöhn and Eloff (2003:21) identified the following domains and assets as basis to identify assets within middle adolescents:

- ❖ *"Cognitive characteristics: memory, attention, observation skills, planning, reflection, visualisation, metacognition and problem solving.*
- ❖ *Emotive characteristics: caring, coping, passion, support, adaptability and recognising feelings.*
- ❖ *Behavioural characteristics: making friends, networking, pro-activity, vision, goal setting, learning from living, integrity, leadership, interpersonal skills.*
- ❖ *Life skills: self-regulation, self-awareness, empathy, self-confidence, influential skills and survival skills."*

The above-mentioned assets and strengths identified by Ebersöhn and Eloff can be found in modalities of resiliency and can be utilized in schools and communities as a preventative measure against the life's onslaughts. These cognitive, emotive and behavioural characteristics should therefore also be included in the development of the Resilience Enhancement Kit to foster these qualities of middle adolescents and utilize their strengths in these areas.

Jew, Green and Kroger (1999:10) as well as Mangham, McGrath, Reid and Stewart (1995:12) found in their studies that the construct of resiliency needed to be studied for its importance in wellbeing and that there are few preventative intervention measures addressing resiliency with a focus on strengths. Even though resiliency is seen as an innate capacity, resilient behaviour adapts with each developmental phase and can vary on a continuum of less optimum resilience to optimum resilience based on the middle adolescent's developed skills. Hunter and Chandler (1999:5) illustrated this view by the following diagram:

**Diagram 1: (With permission: Appendix B)**



This illustration indicates that resilience is a diverse and dynamic phenomenon. The inherent characteristics and competencies that foster resilience need to be developed by means of guidance and nurturing from parents, teachers and significant others. The middle adolescent's level of resilience differs in changing circumstances for example an adolescent might be very resilient when it comes to resisting unfavourable peer-pressure but less resilient when managing academic stress in his or her life. Resilience modalities must be appraised to be able to identify those modalities that are less optimal to be able to enhance them as well as to aid the middle adolescent in using optimal resilience modalities more effectively. The middle adolescent must be able to draw upon his or her biological, psychological and environmental resources to successfully adapt and cope with the challenges of life. Middle adolescents should be guided in learning how to identify the assets in their various contexts. Howard and Johnson (2003:4) stated protective factors that influence resilience in middle adolescence and are summarized as follows:

**Table 1**

| <b>LIFE EVENTS</b>  | <b>SELF</b>   | <b>FAMILY</b>   | <b>SCHOOL</b>  | <b>COMMUNITY</b>   |
|---|---|---|--|--|
| <ul style="list-style-type: none"> <li>• <b>Full term birth</b> <ul style="list-style-type: none"> <li>- Satisfactory birth weight</li> <li>- Injury free birth</li> <li>- Able bodied</li> </ul> </li> <li>• Continued good health</li> <li>• Opportunities at major life transitions</li> <li>• Meeting significant persons</li> <li>• Moving into a more supportive community</li> </ul> | <ul style="list-style-type: none"> <li>• <b>Personal attributes</b> <ul style="list-style-type: none"> <li>- Easy temperament</li> <li>- Academic ability</li> <li>- Emotional strength</li> <li>- Sense of autonomy</li> <li>- Sense of humour</li> <li>- Social competence</li> <li>- Physical competence</li> </ul> </li> <li>• <b>Coping behaviours</b> <ul style="list-style-type: none"> <li>- Problem solving strategies</li> <li>- Active engagement</li> <li>- Optimism</li> <li>- Persistence</li> <li>- Reflectivity</li> </ul> </li> <li>• <b>Beliefs about self</b> <ul style="list-style-type: none"> <li>- High self esteem</li> <li>- Positive self efficacy</li> <li>- Sense of purpose</li> <li>- Positive attitude</li> <li>- Self confidence</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• <b>Love &amp; attachment</b> <ul style="list-style-type: none"> <li>- Parents</li> <li>- Siblings</li> <li>- Extended Family</li> </ul> </li> <li>• <b>Support</b> <ul style="list-style-type: none"> <li>- Material</li> <li>- Emotional</li> </ul> </li> <li>• <b>Parenting practices</b> <ul style="list-style-type: none"> <li>- Consistency</li> <li>- Positive expectations</li> </ul> </li> <li>• <b>Models of resiliency</b> <ul style="list-style-type: none"> <li>- Parents</li> <li>- Siblings</li> <li>- Extended family</li> </ul> </li> <li>• <b>Positive links with school</b></li> </ul> | <ul style="list-style-type: none"> <li>• <b>Good teachers</b> <ul style="list-style-type: none"> <li>- Positive relationships</li> <li>- Knowledge of children &amp; middle adolescents</li> <li>- Positive behaviour management skills</li> <li>- Positive sense of efficacy</li> <li>- High expectations</li> </ul> </li> <li>• <b>Support</b> <ul style="list-style-type: none"> <li>- Time</li> <li>- Adults &amp; Agencies</li> </ul> </li> <li>• <b>School climate</b> <ul style="list-style-type: none"> <li>- Child-focused</li> <li>- Collaborative</li> <li>- Caring</li> <li>- Safe/Secure</li> <li>- Empowering</li> </ul> </li> <li>• <b>Curriculum and special programs</b> <ul style="list-style-type: none"> <li>- Relevant and enriched</li> <li>- Age appropriate</li> <li>- Social (life skills)</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• <b>Adults</b> <ul style="list-style-type: none"> <li>- Supportive</li> <li>- Protective</li> <li>- Culturally proud</li> </ul> </li> <li>• <b>Pro-social Peers</b> <ul style="list-style-type: none"> <li>- Supportive</li> <li>- Common interests</li> <li>- Common experiences</li> <li>- Sharing</li> <li>- Helpful</li> <li>- Talk with &amp; listen</li> </ul> </li> <li>• <b>Sports and clubs</b> <ul style="list-style-type: none"> <li>- Positive self-identity</li> <li>- Belongingness &amp; connectedness</li> <li>- Opportunities for success</li> </ul> </li> <li>• <b>Agencies</b> <ul style="list-style-type: none"> <li>- Supportive</li> <li>- Protective</li> </ul> </li> </ul> |

The summary illustrates that the development of a middle adolescent’s resilience cannot be separated from the influence exerted by the ecosystem in which he or she functions. Middle adolescents leading competent lives despite disruptive life events exhibit specific characteristics. The resiliency capacities, competencies (that includes attitudes, knowledge and skills), strengths and assets are situated within the middle adolescents’ emotional, social and cognitive modalities. The characteristics identified by the following researchers Benard (1995:1); Henderson (2002:3); Rouse (1998:2); Jew, Green and Kroger (1999:2) as well as Mangham, McGrath, Reid and Stewart (1995:8) form the following essential competencies that constitute resilience:

### 1.1.1. Emotional domain

**Emotional stability** is important in resiliency and can be construed in the following way: a middle adolescent’s emotional stability is like a ‘spirit level’, which is in equilibrium. Significant events could disturb the equilibrium and render the middle adolescent without the necessary resiliency competencies, to become ineffectual in contending and adapting to the stressors in his or her life. The

ability to **identify** personal **emotions** and those of others through perceptiveness and by being conscious of the meaning given to emotion provoking situations, forms part of emotional stability. The insight into the rational or irrational emotional reaction to events in life and the necessary competencies with which to control it is an important aspect of resilience. Showing **empathy** towards others, understanding and accepting others within their unique contexts will be an asset in resiliency. **Ego-control** and **ego-resiliency** is necessary to contend with emotional setbacks and reality testing. It also includes internal locus of control that refers to a belief that the middle adolescent can control his or her actions and is not left to the mercy of the environment (contexts) alone. Human beings are dependable on social interaction where resiliency plays an important role.

#### **1.1.2. Social domain**

Social competencies are needed for successful social adaptation. These competencies include the **ability to form and maintain positive relationships** with parents, teachers, peers, significant others and the community as a whole. The ability to **communicate on a verbal and non-verbal level** is important in order to understand received messages as well as conveying messages of intent. Having a **sense of humour** is an important skill in relieving the effects of stress and maintaining favourable relationships. **Autonomy** is the ability and desire to accomplish tasks individually. **Working effectively within a group** is also an important social modality. A **sense of self-identity** is vital for the adolescent as it prevents them from succumbing to unfavourable peer pressure. A **sense of identity** will also enable the adolescent to fulfil his or her place in society. **Self-efficacy** enables middle adolescents to exercise a measure of control over their thoughts, feelings, motivation and actions. Efficacy help determine how much effort middle adolescents will spend on an activity, how long they will persevere when confronting obstacles and adverse situations. **Self-perception** is the way in which a middle adolescent perceives himself of herself and it influences his or her self-motivation, self-worth, self-confidence and self-

esteem. All these above-mentioned competencies empower the middle adolescent to effectively function within society and enable him or her to be a contributing citizen while facing social adversity successfully. Emotional- and social decisions as well as meaning attribution are made cognitively, therefore these resiliency competencies also need to be enhanced.

### **1.1.3. Cognitive domain**

**Meta-cognition** competencies include the ability to solve problems, to plan and think critically, reflectively and creatively. A resilient middle adolescent has a **positive view** of his or her personal **future**, a **sense of purpose, goals** and **aspirations**. These favourable resiliency modalities create hope and motivate a middle adolescent to work hard for their future and overcome problems and obstacles. The middle adolescent's **thinking style** affects how they perceive and react to problems and difficulties and how they use their **meta-cognition** to address the adversities.

Being able to utilize their internal resilience modalities effectively will empower middle adolescents not only to survive against the odds, but also to elicit strengths and to excel in adverse situations. Middle adolescents spend a significant extent of their time in school and many protective factors and processes can be embedded within schools practices, policies and curriculum to help develop and improve resiliency.

## **1.2. The role of the school context in promoting resilience.**

A school can create a nurturing environment so forceful that for at least six hours a day middle adolescents can have a positive influence that can counteract a negative home environment. The school environment can play an efficacious role in fostering resiliency, act as positive catalysts and role models for middle adolescents to develop and enhance their resiliency modalities. Resiliency must be nurtured and cultivated to assist middle adolescents in functioning effectively in school. *"Persons scoring higher on the resiliency scale are likely to*

*demonstrate better academic skills, have a higher internal locus of control orientation, have higher self-perceived competence in scholastics, jobs, athletic performance and friendships and display a wider range of coping skills than their less resilient peers" (Jew et al., 1999:16).*

Developmental tasks in middle adolescents relating to school functioning usually include school adjustment (attendance and involvement in extracurricular activities), academic achievement and development of learning skills. Peer acceptance, the building and maintaining of friendships, vocational planning, forming a sense of self identity as well as pro-social and moral conduct (following the rules of the school) will also form part of school functioning. Schools need to be institutions where holistic learning takes place that would include the integration of intellectual, social and emotional aspects.

The level of social and emotional adjustment and competencies are often reflected through scholastic achievement, behaviour and interpersonal relationships. *"Effectively promoting social and emotional competence is the key to helping young people become more resistant to the lure of issues such as drugs, teen pregnancy, violent gangs, truancy and dropping out of school. Adolescents need to acquire the skills, attitudes, values and experiences that will motivate them to resist destructive behaviours, make responsible and thoughtful decisions and seek out positive opportunities for growth and learning" (Elias, Zins, Weissberg, Frey, Greenberg, & Haynes, 1997:5).* The focus of education must not only focus on the prevention of problems as described by the previous authors but should also promote a process where middle adolescents have the opportunity to discover their potential, to develop values, express emotion and regulate behaviour in striving for self-actualization.

It is evident from the competencies of resilience imbedded in the emotional-, social- and cognitive modalities that resiliency is necessary for success in life. The school can play an important role in fostering and developing resilience in middle adolescents by adapting the curriculum to promote and develop social, emotional and cognitive resiliency. Due to the knowledge the Educational psychologists has regarding the development of the middle adolescents, how they learn as well as the aspects that constitute and contribute to resilience, they can play a significant role in advising and guiding the significant role players in the school context to effectively develop and enhance resilience modalities in middle adolescents. Mwamwenda (1995:5) is of opinion that Educational Psychology should focus on providing the significant role players in the school with information pertaining to the middle adolescents' social-emotional behaviour in a variety of social contexts and modes of as well as the growth of social relationships and attitudes in the course of their lifespan. Educational psychologists can assist teachers to prepare instruction that will suit the needs and interest of the middle adolescents. Educational Psychology informs on the stages of growth and development and what kind of teaching is likely to be successful to understand the roles played by heredity and environment in the development of a middle adolescent.

The school should provide a supportive psychosocial environment where teachers address the emotional and social needs of the middle adolescent and not just the cognitive development. Donald, Lazarus and Lolwana (1997:123) agree with the views held by Mwamwenda that physical, cognitive, social, emotional and moral developments are all interdependent and should be taught and processes put in place to enhance middle adolescents' resilient development. A middle adolescent who is upset about something that happened will focus on that particular event and their emotional state will hamper them in paying attention to the lesson being taught or in participating effectively in the learning process. It is important that the teacher must be aware of the learner's

emotional state and address their needs in order to focus the learner's attention for effective learning to take place.

Ian Heath (2001:1) suggests that a middle adolescent's state of emotion is transient and changes with various stimuli during the state of equanimity where there is an absence of projection and introjections. The middle adolescent is in a state of equilibrium until a meaningful situation provokes an emotion that is accompanied by mental and physiological reactions. The Merriam-Webster dictionary (1997:4) calls this purely receptive emotional state "Anoesis" and defines it as "a state of being or mind consisting of pure passive receptivity and sensation without understanding or intellectual organisation of the content presented". Knowledge of the middle adolescent's affective conditions and the level of intensity in stressful and adverse situations could be important in the development of resilience in schools.

*"Expert teachers are adept at recognising and addressing the emotional state and socio-emotional competencies of learners and based upon their observation, they take some action that positively impacts learning. But what do these expert teachers 'see' and how do they decide upon a course of action? How do learners who have strayed from learning return to a productive path?" (Kort, Reilly & Picard, 2002:1).*

Studies addressing the emotional state and emotional competencies of the South African adolescent are sparse. There is a growing need from Educational psychologists and teachers working with middle adolescents from various cultural, linguistic and economic backgrounds who notice the learner's difficulties in adapting to changing situations, and require knowledge regarding ways of developing resiliency competencies in middle adolescents. Personal experience of working within a multi-cultural high school confirmed the identified need to ascertain and enhance the resilient emotional-, social and cognitive competencies of the adolescent as a preventative measure and not just rehabilitation measure.



Cohen (1999:4) concurs with the idea that social and emotional experiences profoundly affect and even determine middle adolescents ability to learn and develop and should not be ignored as crucial aspects that need to be developed to prevent problems in the future. The manner in which the emotions affect the middle adolescents' adaptability for changes in society depends on their level of socio-emotional competencies, which is generally described as emotional intelligence.

*"Middle adolescents are born with a certain potential for emotional sensitivity, emotional memory, emotional processing and emotional learning ability. These inborn components form the core of ones emotional intelligence. This intelligence can be either developed or damaged with life experiences, particularly by the emotional lessons taught by parents, teachers and caregivers during childhood and adolescence. Emotional intelligence represents a relative measure of a person's healthy or unhealthy development" (Hein, 2001:5).*

Therefore, the way in which the middle adolescents identify and manage their emotions and social relationships is an indication of healthy development. Effective management of social and emotional aspects allows middle adolescents to engage socially and in the learning process with success.

Developing healthy social relationships in middle adolescents is an important function of a school. The middle adolescent's resilience can be promoted through relationship with at least one caring adult and in the context of South Africa, where there are single parent family units due to divorce, work or death, a teacher might be that significant adult. Middle adolescents are open to new learning experiences when they feel that they are in a safe, supportive and engaging environment where they can learn from the experiences and interactions with their peers, teachers and psychologists. Modelling of appropriate behaviour by teachers and Educational psychologists as well as teaching pro-social behaviours is essential for middle adolescents in order to learn behaviour management. The school context provides the opportunity for

middle adolescents to learn from different cultures as well as acquiring the norms, values and beliefs that govern society. Social connectedness to teachers, Educational psychologists and peers build resilience because the middle adolescent can identify and utilize them as assets to help them rebound. *"The literature pays little attention to adolescents' relations with other adults who are important to them except their parents, yet these relations exert a tremendous influence on their maturation. During this phase the teacher assumes the role of escort and companion. He or she no longer takes the lead, but walks by the pupil's side which allows them to achieve independence in the school context"* (Gouws & Kruger, 1994:116). It is therefore important that the role teachers and psychologist play in developing resilience competencies in schools be understood and promoted. Educational Psychology places emphasis on the important role emotional and social competencies has on the learning process. How middle adolescents learn is as important as what they learn because the process and content are integrated and are influenced by the social context. Cognitive learning naturally occurs through social interaction. The way a school addresses the middle adolescent's behaviour could be considered one of the indicators of the school's success in incorporating social competence as a significant aspect of educating a middle adolescent holistically. The role of the school context is to enhance resilience through incorporating emotional, social and cognitive competencies in the teaching.

Joseph (1994:191) refers to the words of Greek philosopher Epictetus who said *"people are disturbed not by things but by their view of things"* as well as Shakespeare (Hamlet, act II, scene 2, line 259) who said *"there is nothing either good or bad, but thinking makes it so"*. These quotes reinforce the idea that the way middle adolescents think of what happens to them and the appraisals they make of people and situations primarily determine if they react in a way that reflect resilient thinking. Teachers can enhance cognitive competencies by incorporating thinking skills, problem solving and decision-making skills and a focus on future goals as part of the activities to consolidate content taught. The

school context need to empower learners to become flexible in their thinking in order to apply different thinking strategies in a variety of ways, which will enable them to have a multi-perspective, and balanced approach in dealing with stressful or adverse situations. Constructive thinking empowers middle adolescents to utilize the coping skills necessary to rebound against adversity. "*You can boost your resilience by changing the way you think about adversity. How we analyze the events that befall us has a profound effect on our resilience*" (Reivich & Shatte, 2002:3). The role of the teacher is vital in enhancing resilience in middle adolescents because they spent so much time in the school context and can therefore be influenced by example, content and interaction to learn the necessary emotional-, social- and cognitive competencies for resilient functioning. The research conducted into the resilience of middle adolescents within the school context will be rooted in the literary theoretical framework as it is outlined below.

### **1.3. THEORETICAL FRAMEWORK**

The empirical research of the phenomenon referred to as resilience began in the early 1970's, which emerged from the research of risk and the detection of deficits distinctive to the medical model. According to Curtis and Cicchetti (2003:774), the research of resilience had its foundations in the psychodynamic and behavioural theoretical traditions that largely focused on risk and symptom treatment. Some of the terms often considered synonymous with resilience are coping, persistence, adaptation, and long-term success despite adverse circumstances and strengths. Rutter, in the 1980's, (Jacobsen, 2002:2) pioneered research into resilience through his enquiry into why individuals are able to surmount trying experiences and he also wanted to investigate the protective factors and ameliorating circumstances that assist individuals to withstand disadvantageous situations. Frankenburg (Jacobsen, 2002:3), in his address at the Fifth International Conference in 1987 regarding early identification of children at risk, suggested that research should focus on the factors that assisted middle adolescents to cope with adversity. "*The Benard van*

*Leer Foundation conference in 1991, provided a definite turning point in research as ideas regarding the need to focus on building on the strengths in children came to the forefront" (Jacobsen, 2002:3).* The shift to view middle adolescents differently and focus more on an empowerment paradigm that focused on strengths, rather than deficits, encompassed a merging of various researchers' viewpoints. Strümpfer (1999:3) indicated that the construct of "*fortigenesis (origin of strengths)*" could be traced back to various other researchers' viewpoints such as:

- ❖ Frankl (1964) who referred to the human capacity for self-transcendence;
- ❖ Kobasa's (1970) construct of a hardy personality;
- ❖ Scheier and Carver (1987) who referred to a dispositional optimism and an expectancy for favourable outcomes;
- ❖ Epstein's (1989) construct of constructive thinking in achieving and maintaining emotional and physical wellbeing;
- ❖ Snyder's (1995) construct of hope to meet goals.

Studies into the advanced construct of resilience unfolded and "*a conceptual framework developed that viewed resilience as a dynamic process that is influenced by neural and psychological self-organization as well as transactions between the ecological context and the developing organism" (Curtis et al., 2003:776).* According to Turner, Norman and Zunz, (1995:25) the concept of resilience model has developed through the years and is founded upon three theories of social and behavioural science namely that of the Social Learning Theory, Cognitive Behavioural Theory and Health Realisation Theory. This research comprises of these above-mentioned theories and includes the Ecological systems theory of Bröfenbrenner and the Asset-based perspective. The impact of the Positive Psychology movement regarding resilience will also be discussed.

### 1.3.1. Social Learning Theory

The Social Learning theory of Bandura emphasizes that human behaviour is learned by observation, modelling and imitation. Human behaviours also include attitudes and the emotional reactions of others. "*Social learning theory explains human behaviour in terms of continuous reciprocal interaction between cognitive, behavioural and environmental influences*" (Rutledge, 2000:1). This statement implies that learning occurs within a social context. The social learning theory underlies the concept of resilience because social environments play an important role in the development of values and attitudes while creating the opportunity to practice behaviours and reinforce aspects like social competencies.

Rutledge (2000:5) emphasises that middle adolescents' self-efficacy and self-regulation, key aspects of resiliency, could be enhanced through observing, modelling and imitating significant others especially with regard to middle adolescents and their peers. The school context is an ideal setting where resilience can be enhanced because the middle adolescents are amongst their peers where they can learn from each other as well as having the guidance of a teacher to facilitate the learning process. Middle adolescents learn values, social rules, roles and skills from their peers that will enable them to function within society.

The Social Learning theory can be incorporated in the compilation of the Resilience Enhancement Kit by structuring activities that require learners to work together in groups or pairs as well as observing demonstrated or modelled behaviour from the teacher or psychologist. The importance of social learning and the application thereof in the assessment instrument (Resiliency Scale for learners) can be stated as questions that require the middle adolescent to reflect on how they apply and utilize socially constructed behaviour (see questions 8; 9; 10; 15; 20; 26; 27; 29; 31-40;49; 55; 58; 60; 66; 72). How middle adolescents

think, feel and react in the social context also reflect their level of resilient functioning.

### **1.3.2. Cognitive Behavioural Theory**

Thompson and Rudolph (1996:177) suggest that the Cognitive Behavioural theory is often associated with the Rational-Emotive-Behaviour theory of Ellis and utilized as an integrative therapeutic approach. The Cognitive Behavioural theory focuses on the interplay among cognition, emotions and behaviour. The theory states that how and what middle adolescents think, influences their emotional reactions and behaviour.

The interacting and interdependent nature of emotional-social- and cognitive competencies require that the teacher in the school context should create an environment where the middle adolescents can explore, express and develop these competencies in the process of learning. In education, teachers are concerned with influencing the behaviour of middle adolescents and Educational Psychology enables the teacher to understand the causes of behaviour as well as how emotions can affect behaviour. In support of this view Mwamwenda (1995:6) states that the research of Educational Psychology informs prospective and practicing teachers to have knowledge about how middle adolescents think, respond and feel as well as why they behave as they do, and what initiates and sustains their behaviour. Educational Psychology is intended to provide teachers with knowledge of personality development, which can assist them in guiding middle adolescents to self-actualization and the positive self-concept deemed important to academic achievement and adjustment.

Behaviour is learned and can therefore be changed through behaviour modification and thought-restructuring methods. Grohol (1995:1) state that the Cognitive-behavioural theory focus on a person's irrational or faulty thinking and behaviours but that it can be changed by educating the person to modify their thinking and reinforcing positive experiences that will lead to changes in the way

that person copes. Winnett, Bernstein, Cogswell and Paris (Thompson et al., 1996:178) initiated the development of the Cognitive Behavioural Therapy in 1987. The therapy model incorporates aspects that could foster resilience such as *"behavioural procedures that include contingent reinforcement, shaping, prompting and modelling to increase social interaction; pairing successful task completion with positive self-statements and reinforcement for those self-statements; cognitive interventions which are used with social-skills training; role-playing and self-management and self-control procedures such as self-evaluation and self-reinforcement"* (Thompson et al., 1996:178).

These mentioned aspects can be incorporated when compiling the Resilience Enhancement Kit to include activities geared towards addressing the middle adolescents thinking style by utilizing meta-cognitive strategies and self-evaluation questionnaires, teaching them positive self-talk statements (reinforced through tokens in the board game) as well as how to apply ego-resiliency strategies (through role-playing, modelling and games). The assessment instrument (Resiliency Scale for learners) focus on the emotional-, social- and cognitive competencies and because it is a questionnaire that rely on the middle adolescents' perception on their functioning in these areas, the teacher and psychologist can ascertain how they evaluate their own thoughts, feelings and behaviour to assist them in areas in need of further development. The middle adolescent must also be guided towards being realistic about their resilient functioning in order for them to develop self-regulating strategies that will aid them in rebounding.

### **1.3.3. Health Realisation Theory**

Wartel (2003:185) indicates that the Health Realisation theory had been used for the past 27 years but was only recently been described by Roger Mills and George Pransky. The Health Realisation theory is founded on Cognitive and Constructivist theories.

The theory suggests that just as human bodies have a survival and healing capacity, minds also have an innate self-regulating (self-help) mechanism through common sense. Thought is seen as the foundation for feeling and behaviour and that middle adolescents construct their own view of reality through two modes of thinking. Mills and Shuford (2003:12) indicate that positive or negative thoughts become blended with consciousness to form a perception of reality at each moment. Wartel (2003:185) quotes Mills' (1995) explanation of the theory as follows "*the Health Realisation theory uses three principles: mind, thought and consciousness. The metaphor of a film projector is used to explain the process. Mind, the irreducible source of mental energy is the projector. Thought is the film through which the light – carrying sensory stimuli- shines. Consciousness is the light, causing the images on the screen to appear real.*"

The underlying principals of the Health Realisation theory according to Mills and Shuford (2003:10) are the following:

- ❖ Middle adolescent's perceptions and viewpoints are formed by way of thought combined with consciousness and projected outward by the mind;
- ❖ middle adolescents have an inborn capacity for good judgement, common sense, learning and insight;
- ❖ middle adolescents can be guided to recognise the perceptual-emotional state that stemmed from conditioned thinking in contrast to the types of feelings and insights that accompanies healthy states of mind;
- ❖ middle adolescents can be guided to recognize patterns of negative feelings that point back to thinking and that a middle adolescent can decide to act or not on those feelings.

The assumption is made that thinking can be either analytical or intuitive. Analytical thinking is useful in problem solving where assessment is coupled with selective information stored in memory to yield solutions and is learned through conditioning. Intuitive thinking is based on intuition, common sense, creativity and wisdom and is used to reflect and to ascertain what is right for the middle



adolescent. Feelings are seen as a "*barometer*" (Wartel, 2003:186) to help middle adolescents differentiate between the two thought processes and use the one most appropriate. Resiliency encompasses healthy thinking and self-regulation inherent to this theory. "*The Health Realisation theory fits in well with the trend towards strengths-based practice, focusing on the client's resources and resilience, on self-empowerment and self-help, effectiveness and efficiency*" (Wartel, 2003:185). The Health Realisation theory emphasises innate resiliency that empower middle adolescents to maintain wellbeing, self-motivation, level-headed thinking and common sense.

This theory can be incorporated in the compiling of the Resilience Enhancement Kit through activities where middle adolescents can share their life stories, apply meta-cognition in solving a mystery and analyzing a situation based on a real life scenario. These activities will allow middle adolescents to use their thinking skills and utilize strengths such as wisdom, creativity and intuition to practice applying their skills in scenario's that imitate real life which will enable them to draw upon experience when they have to help (rebound) themselves in similar situations. The assessment instrument (Resiliency Scale for learners) can incorporate this theory because it measures the middle adolescent's ability to draw upon his or her own strengths, thinking style and meta-cognition to be able to rebound (see questions 8; 9; 10; 11; 15; 16; 19; 22; 23; 24; 27; 28; 29; 30; 33; 38; 39; 41; 43; 45; 47; 49; 52; 54; 56-65; 69; 73, 75). The middle adolescent has inherent strengths but they can also use their environmental support systems to help them rebound.

#### **1.3.4. Ecological Systems Theory**

Waller (2001:2) is of the opinion that resilience is an ever-changing product of interacting relationship within a given ecosystemic context. The Ecosystemic perspective is a coalescing of the ecological and systems theories. The ecosystemic perspective emphasises the interrelatedness and interdependency between the middle adolescent and the various social systems. The micro

system includes the middle adolescent's immediate surroundings namely the home, classroom, peer groups and school. The macro system includes communities, cultures and broader civilization. Each social system has its own dynamics, rules, discourses and relationships. This view is supported by Bartelt (1994:101) who is of opinion that resiliency has its place within a dynamic model of the self, the family and the community, each part of a vibrant environment influencing the educational process. Furthermore, Waller (2001:6) quotes Brönfenbrenner (1979) as saying that "*resilience is not static. There is a bidirectionality in the relationship between a person and the environment where middle adolescents influence life situations as well as being influenced by them. At different points in time the same middle adolescent may respond very differently and be resilient in response to one adverse life event, yet vulnerable to another*". This implies that various resiliency factors that are situated within the middle adolescent (emotional, social, cognitive, biological and normative) and within the family and community that are linked in a dynamic, interdependent and interacting relationship according to Donald, Lazarus and Lolwana (1997:34).

The adolescent is viewed holistically within the ecosystemic perspective and the middle adolescent's resiliency can vary within different situations for example the middle adolescent can be resilient when identifying his or her own emotions but not as capable of identifying emotions in others. Resiliency can be promoted within the context of middle adolescent's supports and with the aid of the various systems. The schools (micro system) can play an important part in fostering resilience in middle adolescents. In compiling the Resilience Enhancement Kit this theory will be utilized to develop the middle adolescents' resilience modalities in the school context as well as amongst their peer group. The middle adolescents will be encouraged to utilize the broader community as assets, for example activities geared towards finding a prominent role model in society or resources that can be harnessed to develop and foster resilience. The Resiliency Scale for learners will have to take into consideration the internal and external

contexts that can aid in fostering resilience, for example personal characteristics, parents, peers and the school context.

### **1.3.5. Asset-based perspective**

Scales and Leffert (1999:5) mention that since 1989, Asset-based research has been conducted and is grounded in the literature on resilience, prevention and adolescent development that has illuminated the positive relationships, opportunities, competencies, values and self-perceptions that middle adolescents need to succeed. The Asset-based approach emphasises the inherent strengths, system supports and opportunities middle adolescents have to assist them in dealing with life's adversities and stressors. *"The Asset-based perspective can promote resilience among young people because it weaves a strong fabric that supports and guides positive youth development even in the face of multiple adversities"* (Scales et al., 1999:10). The Asset-based perspective is a capacity-focused paradigm that perceives the middle adolescent and community to be *"active change agents rather than passive beneficiaries"* according to Kretzmann and McKnight (1993:7). This implies that middle adolescents and communities can utilise their own internal and external assets to mobilise it in enhancing their level of resilience. According to Scales and Leffert (1999:6), there are eight categories of developmental assets to enhance resilience:

#### **External assets:**

##### ➤ Support

The support assets refer to the ways in which middle adolescents are loved, affirmed and accepted. Middle adolescents must ideally experience and abundance of support from the people in the various social settings.

##### ➤ Empowerment

The empowerment assets focus on community willingness to let middle adolescents contribute to society and specifically the home - and school setting in meaningful ways and creating a sense of being valued by significant others.

##### ➤ Boundaries and expectations

Clear and consistent boundaries are a set of messages about appropriate behaviour and expectations across social contexts.

- Constructive use of time and resources

Communities must provide an array of constructive opportunities that lead to growth and contribute to development in middle adolescents during and after school.

### **Internal assets:**

- Commitment to learning

Developing an internal intellectual curiosity and the skills to gain new knowledge is essential for success. These assets motivate middle adolescents to achieve and express their curiosity and work ethic in homework and schoolwork.

- Positive values and norms

Positive values and norms are the internal compasses that guide middle adolescents' priorities, behaviour and choices in their lives.

- Social skills

These assets are important personal and interpersonal skills middle adolescents need to negotiate the maze of choices, options and relationships they face. These skills lay the foundation for independence and competence.

- Positive identity

These assets focus on the middle adolescents' views of themselves, their sense of self, purpose and worth.

Assets play a critical role in motivation and behaviours that support long-term wellbeing. The asset-based perspective can be included in the compilation of the Resilience Enhancement Kit through activities where the middle adolescent can interview their peers to gain insight into how they can be a support against the onslaughts of life, identifying the characteristics of a role model they admire and even what resources are available at school and in the community that they can utilize for help. The assessment instrument (Resiliency Scale) can also be focused on identifying if the middle adolescent is able to identify and utilize the

assets (internally and externally) in the various contexts to assist them (see questions 20; 27; 29; 31-40; 55; 60; 66) when in stressful and adverse situations.

### **1.3.6. Positive Psychology**

The Positive Psychology movement is headed by Martin Seligman, who with the support of the Templeton Foundation, aims to lead a scientific inquiry into the research of positive human experiences, human strengths or traits. Seligman and Csikszentmihalyi wanted to study human strength, resilience, and optimal human functioning. As mentioned earlier in the theoretical framework for resilience, the interest in mental health rather than mental illness has its foundations in the work of earlier researchers who had also practiced Positive Psychology for example Bandura, Allport and Maslow who Seligman and Csikszentmihalyi drew on in the development of their theories.

Csikszentmihalyi's theory of "flow" describes how a person can spend time and effort on an activity that has few rewards outside itself to produce a mental state where a person can forget about themselves by focusing on the activity. The "flow" is a metaphor for how it feels when the experience of actively participating and focusing of skills to achieve a goal and gaining positive feedback creates a sense of purpose, which can lead to happiness. Csikszentmihalyi's theory incorporates resilience in that a middle adolescent can be actively involved with improving their mental state by utilizing their skills, setting goals and gaining positive feedback as a means to bounce back from stressors and problems in their lives. Seligman agreed with the idea that people need to draw on their strengths to overcome their problems but also to thrive and pursue happiness.

Three important aims of Positive Psychology as outlined by Seligman are to understand what makes life meaningful, to prevent pathology and to help people to not just endure and survive but to thrive. *"The aim of Positive Psychology is to understand and then build those factors that allow individuals, communities and*

*societies to flourish. It needs emphasizing that this endeavour is descriptive, not prescriptive. It requires for the most part a refocusing of scientific energy, the same methods can be used to measure, understand and build those characteristics that make life most worth living"* (Klaassen, 2000:6). Seligman (2002:3) proposed that the time had come to alter the focus on the research, classification and treatment of pathology that was the focus after World War 2, and to focus on enhancing the positive aspects that make people resilient. He also suggested that the attention to pathology in psychology neglected the idea of a fulfilled individual and a thriving community, and neglected the possibility that building strength is the most potent weapon in the arsenal of therapy.

The focus of positive psychology is to change from a fixation only with repairing problems and stressors in life but to build the best virtues in life. Psychology therefore should focus on the prevention of problems and not only the rehabilitation and rectification thereof. The building of competencies rather than just a focus on correcting inharmonious relationships and addressing problems will create buffers against psychopathology and will strengthen preventative measures. *"It is much easier to define the desired or adaptive direction of change if the goal of such change is to restore an earlier state or a 'normal' state. It is a much more difficult issue to define a human strength if one considers psychological changes other than return to prior levels of functioning"* (Aspinwall, & Staudinger, 2002:2). This implies that psychology should focus on enhancing and developing strengths within middle adolescents which will help them rebound and not just focus on merely coping with a difficult situation.

Positive Psychology centres on the individual and community's experiences of competencies and utilizing the inherent strengths to be able to rebound against adversities and to prosper. *"The field of Positive Psychology at the subjective level is about positive subjective experience: wellbeing and satisfaction, and flow, joy, the sensual pleasures and happiness and constructive cognitions about the future-optimism, hope and faith. At the individual level it is about positive*

*individual traits- the capacity for love and vocation, courage, interpersonal skill, aesthetic sensibility, perseverance, forgiveness, originality, future-mindedness, talent and wisdom. At the group level it is about the civic virtues and the institutions that move individuals toward better citizenship: responsibility nurturance, altruism, civility, moderation, tolerance and work ethic" (Seligman, 2002:3).* These mentioned virtues are proposed by Seligman as areas that therapy can focus on to guide middle adolescents to self-actualization and resilient functioning.

However, it is important that the focus of Positive Psychology should not deny the existence of problems but rather harness the strengths and virtues middle adolescents might have to empower them to deal with life. Held (2003:2) refers to Aspinwall; Staudinger, Ryff and Singer who feel "*a psychology of human strengths should not be the research of how negative experience may be avoided or ignored, but rather how positive and negative experience may be interrelated. We underscore the need to move beyond false dichotomies that separate positive and negative features of the human condition, human wellbeing is fundamentally about the joining of these realms.*" Keeping this view in mind the Resiliency Scale for learners enables the middle adolescent to see where their strengths are in their emotional-, social- and cognitive modalities as well identifying the areas that need developing and enhancing to optimize resilient functioning. Furthermore, the Positive Psychology theory could be incorporated in the compilation of the Resilience Enhancement Kit by making the middle adolescents aware through the activities presented (for example identifying and describing their sense of self) that they have strengths that can be assets to others and themselves. The middle adolescent can focus on a future expectation guided by a belief in themselves and goals that direct their behaviour.

No research on resilience would be complete without looking critically at the limitations and problems the theory poses in literature. Lewis (2000:3) indicates that resilience has been a characteristically American concept that cannot be

divorced from the cultural context of that society. Therefore, it is crucial for research to be undertaken in various countries that critically look at the similarities and differences in the aspects that compose resiliency. In this research resiliency will be explored within the South-African context and its inherent values and norms. Lewis (2000:3) further suggests that "*the assumption is often made that it is always possible to overcome adversity by your own efforts, and that those who are overwhelmed by their circumstances are in some way culpable, lacking moral fibre.*" This view that an middle adolescent is either resilient or not at all is an incorrect assumption, as discussed earlier and quoted from Hunter and Chandler (1999:5), resilience lies on a continuum and a middle adolescent might be less resilient in one area (modality) of his or her life but more resilient in a different area (modality). Furthermore, it is important to view the middle adolescent holistically, functioning within the various contexts in a dynamic, interactive and interdependent relationship that implies that a middle adolescent can enhance his or her resilience with the involvement of these contexts. The way in which these contexts can assist the middle adolescent to become more resilient must therefore be researched, and in this research the school's role in enhancing resilience will be explored.

Bartelt (1994:101) has some methodological apprehensions about how the concept of resilience is defined and measured. "*Are the indicators (of resilience) measuring which they purport to measure, can the concept be empirically specified and offer consistent relationships with other variables that it is supposed to be related, or unrelated to? Successful adaptation is seen as evidence of resilience, and unsuccessful adaptation as an absence of resilience. Resilience itself, however is never directly observed, it is always imputed. As an empirical concept, then, there is difficulty in identifying an unambiguous referent to this force/ factor of resilience*" (Bartelt, 1994:101). In the light of the question posed by Bartelt, Lewis (2000:4) is of opinion that researchers should identify aspects of a middle adolescents' experience that lead them to act in ways that are more resilient and encourage middle adolescents to learn from their



experiences. In this research the method of appraisal of resilience will be based on aspects identified through literature as well as the aspects learners describe that make them resilient based on their life experiences. Newman and Blackburn (2002:10) are of opinion that the literature on resilience promotion, while empirically based, includes few accounts of specific strategies used to promote resilience. They feel that the current theories merely describe the relationship between variables but that it is an inadequate basis for psychological practice. This implies that there is a need to identify ways of enhancing and developing resilience and in this research this need will be addressed.

Another aspect that has to be kept in mind is that ethical or value systems that people base concept of strength or assets on can differ from culture to culture. It is necessary to realize that there may be situations and contexts where attributes or processes that work as strengths in one cultural context may be liabilities in another. Aspinwall and Staudinger (2002:3) reiterates this view and are of opinion that normative issues need to be clarified because objective and subjective criteria often result in different ideas about what is functional or adaptive in a person and therefore what constitutes a human strength. This research will take into account the cultural differences found in the South African population because the research will be conducted in a multicultural context and the middle adolescents will have the opportunity to share their life experiences within their cultural frameworks. The focus on strengths and using personal assets in overcoming adversities as well as learning to rebound from the example set during social interaction necessitates that resilience should be understood from various theories and perspectives and not just from a single frame of reference.

It can be concluded that resilience is an aspect to be fostered throughout a middle adolescent's development by strengthening protective processes. When resilience is viewed as a developmental process, residing internally and externally within middle adolescents, then fostering strategies for change can be

directed toward practices, curriculum, and attitudes among the helping profession and educators.

#### **1.4. AIM OF THE RESEARCH**

This research forms part of a wider comparative research between South African and Dutch middle adolescents regarding the relationship between resilience as demonstrated in school-related functioning and the school context. Aspects which will be part of the scope of the wider comparative research but not of this research include a pilot research to formulate an asset focus list in the school context based on resilience characteristics regarding middle adolescents from different races, languages and socio-economic groups compared to those of the Dutch middle adolescents as well as the in-depth analysis of the school context.

The changing role of the Educational Psychologists in the twenty first century requires that the knowledge and expertise regarding the middle adolescents' development, teaching and learning, be shared with the relevant stakeholders in education to empower them in assisting the learners to reach their full potential.

*"As psychologists, we have the knowledge of the principles of human development, and we are specialists in social and human relations and their vicissitudes. Such specialist knowledge as we possess fits us to contribute to the design of schooling systems, curricula and educational policy. In accordance with the APA (division of Educational Psychology), psychology is concerned with the development, evaluation and application of theories and principles of human learning, teaching and instruction and theory-derived educational material, programs, strategies and techniques that can enhance life-long educational activities and processes" (Sharrat, 1995:212-213).*

Therefore as specialists, it is the task of the Educational Psychologist to develop material and empower significant stakeholders in the schools to assist the middle adolescent with enhancing and developing their resilience modalities. The aim of this ethnographic research is to describe and explore the process of how to appraise, develop and enhance the modalities of

resilience of the South African middle adolescent in the school context (within a private school in South Africa). The research of resilience modalities will contribute to the development of the Resilience Enhancement Kit as an intervention instrument and Resiliency Scale that can be used within the school context (for example in the subject Life Orientation) by teachers and psychologists to appraise, foster and enhance resiliency in middle adolescents. It is envisaged that the outcome of the research could add to the knowledge base concerning resilience and might inform on curriculum development. Sharrat (1995:216) emphasises that the role of the Educational psychologists is to "*bridge the gap between theory and practical application. The teachers need assistance in the school system in areas where theory and methods of application need to be developed to suit the needs of the learners within the South African context.*"

### **1.5. PROBLEM STATEMENT**

The exploratory question of this research can be adjudged as follows:

- ✘ How might the modalities of resilience of the middle adolescents be appraised and enhanced?

The following sub-ordinate questions will be examined to illuminate the critical aspects of this research:

- ✘ What is the nature of the emotional- social and cognitive resiliency modalities of the middle adolescent?
- ✘ What contents and methods could be developed to appraise and enhance the resilience modalities of the middle adolescent?

### **1.6. LITERATURE REVIEW**

The necessity for a preliminary literature review as well as a critical analysis of literature is due to the fact that there is little research done regarding the level of resilience of middle adolescents in South Africa. Furthermore, the preliminary literature review indicated that the current research on resiliency focuses only on

single aspects found in the resiliency modalities of middle adolescents. An in-depth literature review is necessary to amalgamate the aspects that constitute resiliency in order to gain a holistic framework of a middle adolescent's resilience modalities and serve as a contribution to the knowledge base regarding the assessment and development of resilience. It is important that the constituents for the appraisal and enhancement of the modalities of resilience in this research have its foundation in relevant literature. The determinants of resiliency must also be elucidated by means of the literature review because it serves as the guideline to ascertain participants' functioning on the continuum of resiliency by means of a Likert-type scale. There will be an in-depth review of relevant literature regarding the nature, theories, development and appraisal of emotional-social- and cognitive competencies necessary for the modalities of resilience. Information gathered for the literature review will be extracted from recent books; articles in journals, periodicals and scientific electronic information gathered from the internet.

## **1.7. RESEARCH METHODOLOGY**

### **1.7.1. Paradigmatic perspective**

Research is canvassed on the framework of how the researcher interprets his or her reality within a 21st century society and incorporates the anthropological-ontological approach obtained from educational tutelage. The anthropological views held by Educational psychologists and described by Van Niekerk (1991: 19-26) can be outlined as follows:

- ❖ The middle adolescent is seen as being part of a social network (Ecosystemic perspective) with norms and values in the world but also an active participant in his or her learning and development.
- ❖ The middle adolescent is seen holistically and viewed as unique with his or her own abilities, needs and assets.
- ❖ The middle adolescent has the potential for continuous development but requires the guidance of teaching and instruction to reach his or her full potential.

- ❖ All middle adolescents have the inherent drive to be someone and form their own identity.
- ❖ The middle adolescent has a historicity of relationships that interact and he or she is influenced by the times he or she lives in.

The ontological stance according to Ritchie and Lewis (2003:11) refers to the nature of the world and what can be known about it. Educational Psychology studies the middle adolescents' sense of reality through the socially constructed meaning they give to their life world. *"Ontological view studies the nature of reality. There is a view that there are multiple socially constructed realities and inquiry seeks to identify limited patterns that may be culturally specific"* (Eric Clearinghouse, 2004:1). The paradigmatic perspective of the research on resilience will therefore encompass the middle adolescents' interactions and meanings of their life world within the school context.

The nature of the problem statement guides the research methodology and this research will be conducted from a combined quantitative- and qualitative approach. These two approaches are seen as complementary to each other within a model described by Creswell (1994:173) as a dominant-less-dominant model. *"In this design the researcher presents the research with a single, dominant paradigm with one small component of the overall research drawn from the alternative paradigm"* (Creswell, 1994:174). This implies that the research will mainly be grounded in the qualitative approach but quantitative information will be collected from the statistical analysis of the sample group. Qualitative research is the method of inquiry that seeks to understand social and cultural phenomena within the context of the participant's perspectives and experiences. *"Qualitative inquiry, is an interactive research field, and is derived from subfields of the disciplines of anthropology, sociology and psychology. Qualitative research is naturalistic inquiry that discovers the natural flow of events and processes and how participants interpret them. The research describes and analyzes people's individual and collective social actions, beliefs, thoughts and perceptions"* (McMillan & Schumacher, 1997:391). In this research the middle adolescents'

perceptions regarding their own resilience will be ascertained as well as their views on what positive influences and aspects made them bounce back against adversities. The middle adolescents are also required to draw upon their personal and shared experiences in developing those modalities of resilience that needs to be enhanced. Qualitative research is more flexible, responsive and open to contextual interpretation and therefore it will be more suited for ascertaining the adolescent's emotional-, social and cognitive modalities of resiliency. The qualitative approach uses an inductive form of reasoning, which implies that a phenomenon is observed, data is collected, themes analysed and conclusions are drawn.

The epistemological stance in this research regarding the middle adolescents' level and development of resilience will be conducted from an interpretive approach. *"Interpretative research starts out with the assumption that access to reality (given or socially constructed) is only through social constructions such as language, consciousness and shared meanings" (Myers, 1997:6)*. The quantitative method will be used when the middle adolescent's resiliency will be ascertained through a self-disclosure questionnaire regarding their perceived levels of resilient functioning. An open-ended question will be analyzed for the determinants that the middle adolescents feel contributed to their level of resilience. The preliminary literature research and personal experience working with middle adolescents emphasised the need to develop and foster emotional-social and cognitive resiliency competencies to handle adversities and stressors effectively in a fast passed and ever-changing world. The empirical design and literature review are selected as it complements the inductive approach used in this research.

### **1.7.2. Empirical investigation**

The wider research between South Africa and the Netherlands will be executed within the design of a comparative cross-cultural and cross-national research. A

detailed discussion of the research methodology of this research will be presented in chapter six; a compendious demarcation of this research is presented in this chapter and is outlined as follows:

#### **1.7.2.1. Case studies**

The exploration of this research problem will be conducted by means of comparative data analysis and an in-depth interpretation of case studies. "A *case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context*" (Myers, 1997:5). The case study analysis focuses on the phenomenon of resilience in middle adolescents. Case studies are chosen due to the flexible nature thereof for the varying contexts and meaning attribution of the multi-cultural group of middle adolescents. The analysis of the data from the case studies will provide insight into the participant's perceptions of their social realities with regard to their level of resilience and factors that influenced their resilience. The participants will be asked to fill in a questionnaire regarding their resilience modalities and open-ended question will be posed. The case study design is also used in the development and evaluation of a structured design (Resilience Enhancement Kit) to enhance resilience in middle adolescents.

#### **1.7.2.2. Sampling and Population**

The sampling will be based on a maximum variation sampling process. "A *heterogeneous sample is purposefully selected to search for unique cases and commonalities in experiences*" (Schurnink, 1998: 255). The target population for this research will be made up of 14-year-old middle adolescents in an inner-city school located in Johannesburg. The total number (30 learners) in grade 8 will be assessed for their levels of resilience. The school is chosen for its diverse multi-cultural composition even before 1994. The school has been in existence for 40 years and despite adversities experienced by the learners, it boasts a full matric pass-rate.

### 1.7.2.3. Likert-scale questionnaire (Resiliency Scale) and open ended question

*"The Likert Scale was developed by Rensis Likert in the 1920's in an attempt to improve the levels of measurement in social research through the use of standardized response categories in survey questionnaires. It is one of the most frequently used attitude measure in social sciences. Participants are requested to state their level of agreement with a series of attitude statements. Each degree of agreement or disagreement is given a value on a predetermined scale. Often a set of Likert items will be summed to provide a total score for the attitude"* (Hitchcock & Porter, 2003:1).

Likert scale is an ordinal scale that captures the middle adolescents' perceptions toward a set of mental or behavioural beliefs about a given object. As mentioned earlier instruments to ascertain the level of resilience in middle adolescents for the South African population is sparse. A Likert-type scale will be developed based on the literature on resiliency determinants found within the emotional-, social and cognitive modalities of middle adolescents. The aim of this Resiliency Scale is to ascertain the level of resilience in each of these various modalities and identify learner's views regarding their level of resilience.

There will be open-ended **question** posed to all the middle adolescents to supplement the Resiliency Scale regarding what the middle adolescent feel contributed to their level of resilience. The open-ended question is stated as follows: *"Hello. Do you remember filling in a questionnaire on (date)? I need you to tell me more about how you cope in life. Can you tell me how you do it?"* Five register / class teachers will also be asked to identify five resilient and five less resilient learners (from the target grade 8 group) in their classrooms and complete the Resiliency Scale for teachers (Likert-type questionnaire) on each of the identified middle adolescents. The findings of the teachers will be compared to that of the middle adolescents' views on their levels of resiliency. The Resilience Enhancement Kit will be administered to the middle adolescents to



develop and enhance their resilience and then the Resiliency Scale for learners will be reintroduced to appraise their level of improvement. An exposition of the adolescent responses in the Resiliency Scale and the nature and results of the Resilience Enhancement Kit will be discussed and included in chapter six.

#### **1.7.2.4. Resilience Enhancement Kit**

The determinants found in the Resilience Enhancement Kit are based on the literature regarding resilience found within the emotional-, social and cognitive modalities. The Resilience Enhancement Kit includes activities such as group work, role-play and a board game, that can be administered by Educational psychologists and teachers in an enjoyable and non-threatening way to enhance and develop the resilience modalities in middle adolescents.

*"Most child psychologists consider board games to be an essential resource to help build connections and relationships with young adolescents as well as working on their problems. Games bring a sense of safety and permissiveness, opening doors for expression while mimicking real life and thus providing a metaphor for projection of unconscious material. Overcoming challenges and adversities is a critical aspect of resilience that requires the experience of failure and of making mistakes and learning from them in an enjoyable controlled environment when playing a game" (Reid, 2001:13).*

Therefore, the Resilience Enhancement Kit will also include a board game in order to allow the middle adolescents to express themselves and learn in a non-threatening manner. As discussed earlier, the preliminary literature review indicated that there has been little research done regarding enhancing or ascertaining the level of resiliency that amalgamates the relevant determinants into a single framework. There has merely been a focus on single aspects of resiliency in past research. Currently there seem to be only one board game called "*Bouncing back*" that is available in America, which aims to introduce some determinants of resilience to children in an enjoyable manner. MacFarlane

(2000) from the University of the North West also looked at the personality factors contributing to resilience and provided a group intervention programme to promote wellness in adolescents at risk. The need to develop resilience modalities in middle adolescents that can be incorporated in the Outcomes Based Education school system is paramount in assisting middle adolescents to bounce back against adversities and stressors of a changing society.

The Resilience Enhancement Kit will be divided into the three sections of resilience modalities namely the emotional-, social and cognitive modalities. The Resilience Enhancement Kit will be administered in the format of sessions where the middle adolescents will be given the opportunity to learn and practice competencies that will enhance their level of resilience. At the onset of administering the Resilience Enhancement Kit a session will be allocated to completing the Resiliency Scale for learners that will give an indication of the middle adolescents' level of resilience. There will be a session to convey the rules of the game as well as what is required of the middle adolescents. At the end of each session, there will be a self-reflection questionnaire to ascertain what was gained during the session. There will also be a final session for re-evaluation of the middle adolescents' gained level of resilience by re-administering the Resiliency Scale for learners as well as an opportunity to apply the competencies they have learnt in the form of a board game. The total sessions adds up to ten sessions for the implementation of the Resilience Enhancement Kit and two sessions for the assessment phases. Each session will be planned with a specific aim to enhance and develop an area of resilience.

The Resilience Enhancement Kit is suitable for a heterogeneous group of between four to six middle adolescents in a group that makes it ideal for the South-African context with large numbers of learners in schools. It also falls within the Outcomes-Based Education philosophy where group work plays an important part as well as the idea of working towards an outcome that will empower the middle adolescents with skills for life. *"The characteristics and*

*focus of Outcomes-Based Education are on being learner-centred, being able to use and apply learned knowledge, skills and attitudes for future success. Co-operative learning stimulates peer interaction and learner-to-learner co-operation in the process of fostering successful learning by all. It fosters feelings of positive interdependence and middle adolescent accountability to gain an appreciation for the different middle adolescents and cultures found in South Africa. (Van Der Horst & McDonald, 1997:13 &128).*

The Resilience Enhancement Kit is based on these principals as outlined by Van Der Horst and McDonald to ensure that the learners can optimally participate and engage with the presented knowledge, skills and values. The professional (psychologist and teacher) working with the middle adolescents will be actively involved with the Resilience Enhancement Kit by participating, observing and guiding them in the process. Depending on the size of the groups in other schools, another professional (teacher or psychologist) familiar with the aim and function of the Resilience Enhancement Kit, could be asked to assist in facilitating the process. In this research, the Resilience Enhancement Kit will be administered during the allocated Life Orientation periods in the week that is approximately an hour long. An in-depth analysis of the Resilience Enhancement Kit will be discussed in chapter five.

### **1.7.3. Triangulation**

*"Triangulation is the use of two or more methods of data collection in the research of some aspect of human behaviour. Tri-angular techniques in the social sciences attempt to map out, or explain more fully, the richness and complexity of human behaviour by studying it from more than one standpoint and making use of both quantitative and qualitative data. Triangulation is a powerful way of demonstrating concurrent validity, particularly in qualitative research" (Cohen, Manion & Morrison, 2000:112). Inter-rater reliability will be achieved by means of triangulation in the case studies, through open-ended question, the Likert-type pre-test and post-test (Resiliency Scale) after the Resilience*

Enhancement Kit has been administered. The pre- and post tests therefore are administered after a period has lapsed.

Cohen, Manion and Morrison (2000:115) are of opinion that there are four triangulation categories are frequently used in education. These are time-, space, investigator- and methodological triangulation. Time triangulation refers to the reliability or similarity of data gathered over time and in this research the answers gained from the middle adolescent in their pre- and post-test phase as well as open-ended question will be examined. The space triangulation relates to using participants from different cultures in the research because the differences and similarities in cultures influence generalizing findings. The participants who are participating in this research are multi-cultural. Cohen, Manion and Morrison (2000:114) also refer to investigator triangulation as the using of more than one observer or participant in the research. As the research will be conducted in a school setting the teacher of the grade eight class will also be present during the administration of the Resilience Enhancement Kit and the interpretation of the information will be reviewed and scrutinised by a registered psychologist familiar with the research aspects. The methodological triangulation refers to the using the same method on different occasions and on the same subjects and in this research the same Likert-type questionnaire (Resiliency Scale) will be used to measure resilience with the same middle adolescents after administration of the Resilience Enhancement Kit.

## **1.8. DEFINITION OF CONCEPTS**

Due to the abstract nature of the aspects that is prevalent in the research, it is necessary to clarify the intricacies of what is meant by fundamental terms of the research.

### **1.8.1. Resilience**

Resilience encompasses the middle adolescents' ability and disposition to effectively identify, utilize and manage emotional-, social-, cognitive modalities as

well as constructively and appropriately respond and flexibly adapt to life events marked by adversities, risks and challenges on a personal and environmental level. *"Resilience is the ability of an individual to successfully recover from, or adapt to, adversity and to develop social/emotional and academic competence despite exposure to life's problems"* (Joondalup District Education Office, 2000:1).

### **1.8.2. Resilient middle adolescent**

Resilience is a complex construct that is defined in different ways by researchers in terms of it being a dynamic developmental process, disposition or capacity and a sustained positive outcome. In this research and the wider comparative research, the resilient middle adolescent will be operationally defined as follows: The resilient middle adolescent has a disposition, when faced with perceived diverse situations, to identify and utilize apposite personal modalities (capacities, competencies and strengths) and assets within their contexts to rebound in an optimal manner. The interaction between the middle adolescents and their contexts elicits sustained constructive outcomes that include continuous learning (growing and renewing), fulfilment of needs and flexibly negotiating the situation.

The middle adolescents' school related behaviour is therefore seen as a manifestation of the quality and actualization of their resilient modalities within the school context. *"In understanding resilience the following must be considered: the developmental history which focuses on the competence or psychological functioning of the individual over time; the nature of the adversities faced by the individual; the individual and social assets and risks; the individual characteristics that function as vulnerability or protective factors; environmental liabilities or protective factors and the context for adaptation"* (Masten, 1994:5). In this research, the modalities of resiliency will be investigated as it is found in the emotional-, social- and cognitive domains of middle adolescents.

The modalities of resilience will be outlined hereafter. "*Social-, emotional- and cognitive competence is the ability to understand, manage and express the social and emotional aspects of one's life in ways that enable the successful management of life tasks such as learning, forming relationships, solving everyday problems and adapting to the complex demands of growth and development*" (Weare, 2000:24). The competencies that forms part of resilience modalities will be highlighted in this research.

### **1.8.3. Competencies**

Competency is a holistic concept regarding a combination of attributes that encompasses attitudes, knowledge, understanding, values and skills that middle adolescents need and apply in everyday life. Miller, Brehm and Whitehouse (1998:366) refer to Masten and Coatsworth who feel that competence refers to patterns of effective adaptation while resilience is the manifestation of competence in the face of hardship. In this research competencies will be outlined in terms of emotional-, social- and cognitive competencies the middle adolescent utilizes to foster and enhance resilience modalities. "*The positive youth development construct of competence covers five areas of youth functioning, including social, emotional, cognitive, behavioral, and moral competencies. Programs are defined as promoting competence if they focus on building specific skills in these areas*" (Catalano; Berglund; Ryan; Lonczak & Hawkins, 2002:18). It is essential that the emotional, social- and cognitive competencies must be distinguished to obtain a clearer understanding of what will be discussed and explored in the forthcoming chapters.

### **1.8.4. Emotional competencies**

Emotional competencies can be seen as the ability to accurately perceive, appraise, express and regulate emotion in a verbal and non-verbal manner to foster emotional growth and wellbeing. Weare (2000:68) reiterates the need for emotional competence and insight into personal emotional states to be well-

integrated people who can build fulfilling relationships. The heightened emotionality is characteristic of the middle adolescents in their emerging development of self-identity and maturity. Middle adolescents become increasingly more sensitive and aware of their own and others emotions and how they display them during their interaction with their peers and significant others in this developmental stage.

Emotional competence within middle adolescents can be promoted by developing skills for identifying feelings in self or others, skills for managing emotional reactions or impulses, building self-management strategies, empathy, and frustration tolerance. *"Psychological resilience in conjunction with emotional competence yields greater gains or growth following the recovery from adversity or trauma. The emotion-eliciting encounter derives its meaningfulness from the social context in which we have grown up, and thus emotional experience is developmentally embedded in social experience; indeed, the two are reciprocally influential"* (Saarni, 1999:3). Emotional competencies are contextually anchored in social meaning and therefore it is important to obtain an understanding of social competency.

#### **1.8.5. Social competencies**

Social competence is necessary for social adaptation. Social competency implies being socially perceptive and applying a variety of social behaviours in every day life. Intra-personal social competencies include the development of a self-identity, self-efficacy, self-perception and autonomy. Inter-personal social competencies include communication, the forming and maintenance of relationships, being assertive, being able to resolve conflict, and possessing negotiation skills as well as a sense of humour. *"Social competence is the range of interpersonal skills that help youth integrate feelings, thinking, and actions in order to achieve specific social and interpersonal goals. These skills include encoding relevant social cues; accurately interpreting those social cues; generating effective solutions to interpersonal problems; realistically anticipating consequences and*

*potential obstacles to one's actions; and translating social decisions into effective behaviour" (Catalano et al., 2002:16).* Middle adolescents must develop age appropriate inter- and intra-personal skills. The different domains of becoming a mature adult are interconnected and the middle adolescent's cognitive competency is closely interwoven with the emotional- and social competencies in the tapestry of resilience.

#### **1.8.6. Cognitive competencies**

According to the theory of Piaget (Donald et al., 1997:46) middle adolescents are within the formal-operational phase of their cognitive development that requires them to adapt to their environment by self-regulatory processes of assimilation and accommodation of new and changing information and circumstances, some of which can be traumatic or stressful, and lead to the emergence of resilient behaviour. Catalano, Berglund, Ryan, Lonczak and Hawkins (2002:17) refers to the W.T. Grant Consortium on the School-Based Promotion of Competence which defines cognitive competency in two ways namely as *"the ability to develop and apply the cognitive skills of self-talk, the reading and interpretation of social cues, using steps for problem-solving and decision-making, understanding the perspective of others, understanding behavioral norms, and a positive attitude toward life"*. The second aspect of cognitive competence is related to *"academic and intellectual achievement. The emphasis is on the development of core capacities including the ability to use logic, analytic thinking, and abstract reasoning"*.

Cognitive competencies can be promoted within the middle adolescent by focusing on meta-cognition abilities, processes or outcomes, which incorporates logical, analytic and adaptive thinking, problem-solving, decision-making, planning, goal-setting, positive self-talking skills as well as creativity. The various competencies (attitudes, knowledge, understanding, values and skills) form part of the keystones of resilient modalities.



### **1.8.7. Modalities**

In the Ontological and Epistemological approach, modalities are a significant aspect because it refers to the differing and varying levels of a middle adolescent's state or quality of being. *"The research of modality on a philosophical plane may be called Tropology (from the Greek for 'figure', tropos) based on Aristotle's understanding thereof. Modalities are seen as attributes of relations (or of any things, in relation to existence). Modalities are distinguished with reference to their frame of reference (type). The four major types of modality (which may also be more briefly called 'modes'), are the natural (circumstances or context in which it occurs), temporal (timeframe or frequency) and extensional (instances of a universal occurrence), and the logical (differences and similarities in behaviour and the results of their interplay) modalities. Modalities are neither entirely subjective, nor entirely objective, but relate to causal and inductive reasoning"* (Sion, 1996:82). The resilience modalities of the middle adolescents will be explored in this research.

### **1.8.8. Middle adolescents**

According to Gouws and Kruger (1994:4) it is difficult to delimit the adolescent phase in terms of chronological age, but it is generally accepted that the onset is usually at age 13 for boys and age 12 for girls until the age of 21. The adolescent life stage could also be separated into several ages namely early adolescence (10-12 yrs), mid-adolescence (13-16 yrs), and later adolescence (17-21 yrs). *"Middle adolescents are the ages between 13 to 15 years characterised by a time of heightened self-awareness, sexual stirrings, peer bonding, risk taking and increased independence. The middle years is a dynamic time when young people ride the waves from childhood to adulthood"* (Council of Northwest Education, 2001:1).

Adolescence is the life stage that bridges childhood and adulthood. The middle adolescent developmental stage is characterised by changes on a physical, emotional, cognitive and social level. Inherent to this phase is the development of

personal identity, psychological autonomy, self-regulation and psychological maturity based on the impersonation of role models. Le Roux (1992:3) adds to the characteristics that mark this developmental phase as the development of a moral code of ethics, self-discovery and identity formation and social independence. In this research, the target population will be 14-year old middle adolescents in grade 8. The quality of the middle adolescents' resilience modalities are reflected in their school related behaviour in the school context and it is therefore important to define all the concepts distinctly.

#### **1.8.9. School related behaviour in the school context**

The school context must be conducive to the holistic development of its learners, which include the emotional, social, cognitive, physical, moral and normative aspects of the middle adolescent. Positive school related behaviour that the middle adolescents must exhibit, that reflect their ability to utilize their resilience modalities in the school context would include having supportive relationships and adjusting to school life (attendance, participation in extracurricular activities). Academic achievement, peer acceptance, showing pro-social and normative behaviour (keeping to the regulations and rules of the school), complying with task requirements, actively participating in developing skills, self-identity and being future orientated (career planning) are also positive school related behaviour. It is necessary for the middle adolescent to identify and utilize the various assets in the school context to develop and enhance their resilience modalities that could lead to favourable school related behaviour. According to Benard and Marshall (2001:4) resilience in middle adolescents are measured by manifested competence, self-regulation socially appropriate conduct and academic achievement.

## **1.9. RESEARCH PROGRAMME**

- ✘ Chapter 2 will deal with issues relating to the nature, origin, development and appraisal of emotional competencies in middle adolescents within the school context.
- ✘ Chapter 3 will encompass the nature, characteristics, development and appraisal of social competencies in middle adolescents within the school context.
- ✘ Chapter 4 will deal with the nature, characteristics, development and appraisal of cognitive competencies in middle adolescents within the school context.
- ✘ Chapter 5 will contain the Resilience Enhancement Kit design to enhance the emotional-, social- and cognitive modalities of resiliency in middle adolescents within the school context.
- ✘ Chapter 6 will encompass the empirical research design.
- ✘ Chapter 7 will provide a summary and findings of the research and will present conclusions and recommendations of the research.

## CHAPTER 2

### **The nature, origin, development and appraisal of emotional competencies in middle adolescents within the school context.**

*"Emotion animates life. It accounts for the depths and peaks of daily existence, the memorable richness and darkest moments of individual experience"*

*(Saarni, 1999:7)*

#### **2.1. INTRODUCTION**

Experiencing and expressing emotions are integral parts of life; it is the touchstones of human experiences. Yet for many people emotions remain perplexing and difficult to express constructively. The world is multifarious, intricate and multidimensional and emotions guide the middle adolescent to make sense of the world. Emotions give coloration and meaning to everything experienced in life. Unfortunately in this technologically focused society, individuals are becoming desensitized towards their emotions. Emotions are often viewed as unnecessary because it interferes with a high paced life style. Individuals are becoming handicapped in their attempts to express, identify and explain the meaning they attribute to their emotions. Individuals disown their emotions to avoid the discomfort of self-reflection that might lead to necessary personal change.

Barnes and Thagard (1996:1) reiterate this view by saying "*emotions are often conceived as irrational occurrences that cloud judgement and distort reasoning*". The difficulty in identifying, expressing and managing emotions applies to the broader society, because the importance of emotions and emotional competencies are often discarded and not directly taught. However, middle adolescents indirectly learn through the positive and negative example set by

parents, teachers and significant adults in their lives on how to deal with their emotions. *"Although adolescence is not inevitably a period of storm and stress, it is usually characterized by intense experiences of extreme emotions, emotional outbursts or at least emotional tension"* (Gouws et al., 1994:94). The emotional rollercoaster that middle adolescents experience in this developmental phase necessitates the school to address the development and enhancement of emotional competencies that will empower the middle adolescent to rebound against the emotional onslaughts of life.

The exploration of this chapter will focus on the development and appraisal of emotional competencies in middle adolescents as an aspect of resilience and consequently the immense importance that emotions play in being able to adapt to changes and adversities.

## **2.2. Defining terms related to emotional competence**

Although the terms, feelings, emotions and mood are proliferated together because they are used interchangeably in every day life, their meanings are different. Feelings comprise of a conscious perception or intuition of what is being experienced as well as a palpate sense. *"Feelings are defined as a physical sensation connected with sight, hearing, taste or smell, a general state of consciousness related to a sentiment; attitude or opinion. Feelings create the capacity for emotion"* (Norwood, 2001:1).

Emotions incorporate feelings but it also consists of mental processes and components such as physiology, cognition, expressiveness and subjective meaning attribution. Heath's (2001:12) understanding of emotion is as follows: *"consciousness has three modes, those of will, mind and feeling. When will is united with mind it generates desire. When feeling is united with mind it generates emotion. The feeling energises a conceptual response to a stimulus to which the two values of good or bad is attributed"*. Norwood (2001:1) on the other hand defines emotion as *"an affective state of consciousness, which is*

*distinguishable from cognitive and volitional states of consciousness and is usually, accompanied by certain physiological changes- a product of mind and spirit"*. It can therefore be inferred that emotions involve responsivity to an evocative stimulus, which results in physiological reactions, expressive verbal and non-verbal communication as well as motivated actions. The middle adolescent perceives environmental stimuli and then interprets and evaluates it through cognitive processes to create a biological and behavioural reaction to the stimuli.

Another term, which is often confused as being a synonym of the term emotion, is mood. Scherer (2001:7) describes mood as "*a state that resemble emotion in terms of the feeling quality but which are not based on specific events*". If a middle adolescent for example experiences a "depressed mood", it could be due to an endocrine imbalance and therefore independent of a specific event to elicit this feeling. The distinction between the terms is valuable because this knowledge will enable the teacher to assist the middle adolescent discriminate between the physical sensations they experience and why it happens (feeling) as well as how it differs from emotions and the behaviour related to the emotion.

There has been speculation about the preverbal order in which emotions occur as well as the nature of the emotions by various researchers such as Schachter, Singer, Lazarus, Cannon, Bard, James, Lang and Plutchik and Cacioppo (1999:6). They are of opinion that the major categories of emotion consist of joy, sadness, fear, anger, disgust, shame and guilt. Lawson (2002:1) refers to Dr Paul Ekman's work as an expert in the field of emotion, who has identified four core emotions that are universally experienced namely fear, anger, sadness and enjoyment. Based on this research it can be concluded that all human beings possess core emotions such as fear, joy, anger, sadness, attraction and shock that occurs before any meaning is given cognitively, psychologically or before any action is taken. Other secondary emotions can occur based on a sense of

self and a set of standards obtained through acculturation according to which the reaction to events or environmental stimuli is cognitively evaluated.

Knowledge regarding the core emotions is useful in developing activities (labelling, expanding vocabulary and categorising emotions) in the Resilience Enhancement Kit, to teach middle adolescents to identify emotions. Knowledge of the different emotions can be included in the Resiliency Scale for learners and could include questions such as "If I am emotional, I can usually tell what emotion I am feeling such as fear, happiness, sadness or anger". Due to the abstract nature of emotions, continuing research will enrich the understanding of the concept.

The research of emotions has been an area of interest for researchers from the early work of philosophers such as Plato and Aristotle in the 17<sup>th</sup> and 18<sup>th</sup> centuries. *"The measurement of emotions remains a bustling research area. The interplay among social, cognitive and biological processes in emotions is becoming increasingly tractable and emotional phenomena are now fruitfully studied drawing upon theories and methodologies that require collaboration among social, cognitive, developmental, clinical and neuroscientists."* (Cacioppo, 1999:2). Research has been undertaken by various disciplines (medical, social, psychological and even interactive computer technology) to explore the nature, origin and function of emotion.

### **2.3. Nature and origin of emotions**

Mwamwenda (1995:1) is of opinion that psychology is a science that examines observable behaviour and the mental processes of the mind. A holistic discussion of emotions will not be complete without the insight into where emotions originate. Only a brief overview will be given of the biological components of emotions, as it is not the main focus of this research. The functional capacity of the brain can change behaviour including primary reaction tendencies, stress tolerance and adaptive resources. Knowledge about how the

brain functions and how it processes emotional information can assist teachers and Educational psychologists in designing learning experiences that are meaningful to the middle adolescent.

Engle (2004:233) reiterates this view by stating that learning is an activity of the brain and that neuroscience research should inform on the practice of teaching by having an understanding of how the brain works and how information is processed. Teachers who understand the origin of emotions and how they relate to everyday functioning can modify classroom practices to accommodate the middle adolescents' changing emotional state and assist them in managing their emotions so that they are open to new learning experiences.

Lowry (2002:1) suggests that the right hemisphere of the brain is dominant for comprehension and expression of emotion as well as for negative emotions while the left brain hemisphere tends to be dominant in positive emotions. Emotions can be incorporated in the way learners use the left and or right side of their brains (learning style) when developing learning material and therefore the location of the origin of emotions in the brain is important. *"Studies of the brain's emotional modules, the sub-cortical limbic system, show that simultaneously with learning a new behaviour or concept, we also 'learn' an attached emotion, usually related to our feelings about the context. Knowledge of how the brain works may have implications for assessment in school, for example under examination conditions stress can produce emotional climates quite different from those in which the learning to be tested occurred and has an effect on the student"* (Geake, 2003:9).

Emotions emanate in the brain, specifically in the limbic system. The limbic system is a small structure located in the middle of the brain between the lower center brainstem and the higher center or cortex. Lawson (2002:1) accentuates the importance of the limbic system for memory, thinking and learning as well as the impact of positive memories and reactions to the event (emotional state) which will affect learning. McCaffrey (2001:2) agrees with the opinion of Lawson by affirming that the limbic system is involved in recent memory, emotion,

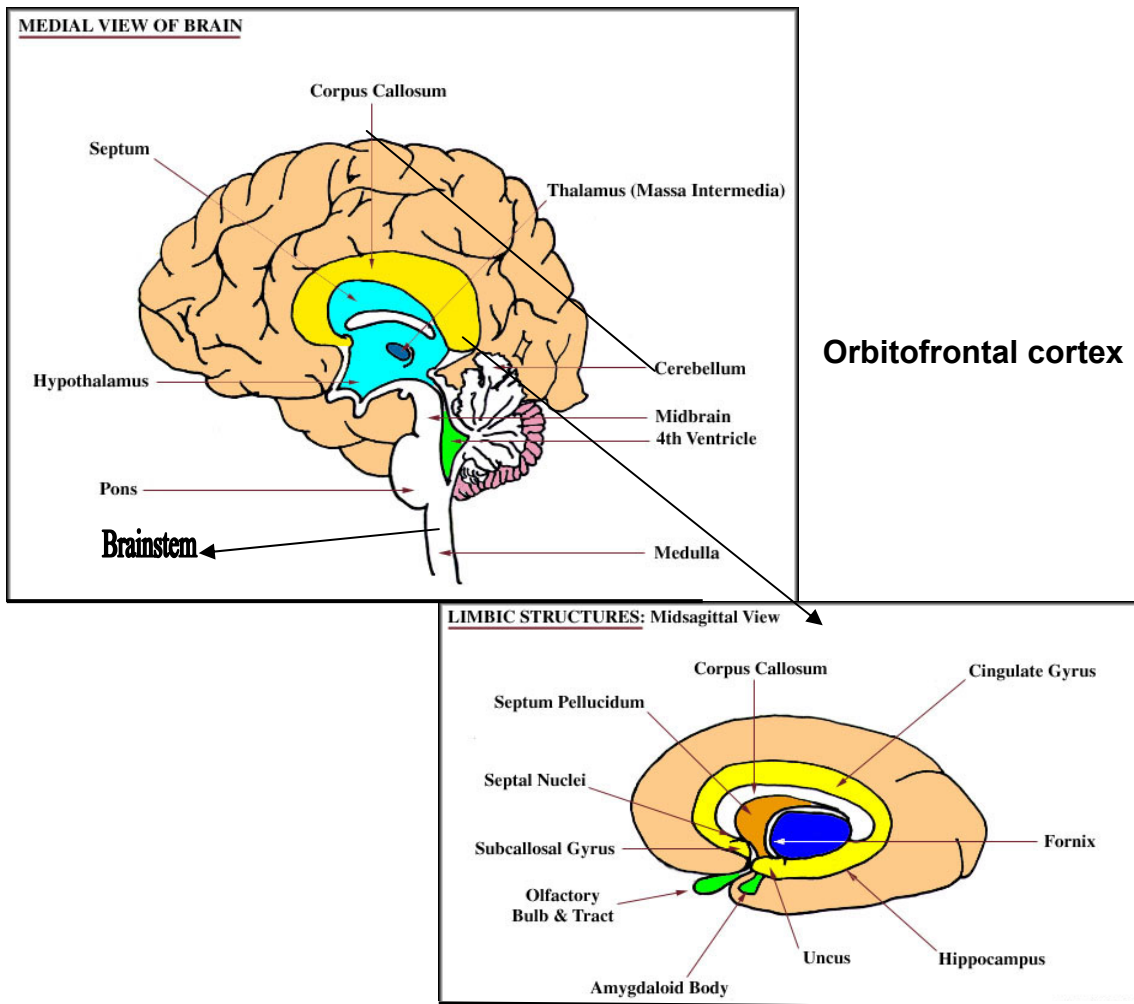


motivation and reinforcement and responses mediated by the limbic system include pleasure, satiety, guilt, punishment, inhibition, alertness, excitement, and autonomic activity.

### 2.3.1. Areas in the brain involved with emotional competence

McCaffrey (2001:3) provided the following image of the areas in the brain where emotions originate:

**Illustration 1 (With permission: Appendix B)**



#### 2.3.1.1. Prefrontal area

The frontal lobes seem to have an important role in meaning middle adolescents attribute to situations and producing the appropriate emotional reaction. "*The prefrontal lobe's intense bi-directional connections with thalamus, amygdala and*

*other subcortical structures, account for the important role it plays in the genesis and specially, in the expression of affective states. When the pre-frontal cortex suffers a lesion, the subject loses his sense of social responsibility as well as the capacity for concentration and abstraction" (Amaral & De Oliveira, 2000:5).* The pre-frontal area of the brain is the regulator of the different areas in the brain involved with emotion. Nunley (2004:4) concurs and states that the prefrontal cortex plays the role of arbitrator in making critical decisions and determine behavior. She explains that it is the prefrontal cortex that regulates the acting out or curtailing of emotions as well as reaction to immediate gratification. She is of opinion that maturity plays a significant role as this area takes about 20 years to develop fully. Hence, adolescents may have problems quickly sizing up risks and making good long-term decisions. The brainstem is another area in the brain involved with emotion.

#### **2.3.1.2. Brainstem**

The brainstem seems to be responsible for the emotional expressions of anger, joy and sadness. According to Amaral and De Oliveira, (2000:5) the brainstem is associated with survival and the emotions related to it (for example aggression). The amygdala and hippocampus are areas involved with generating emotion.

#### **2.3.1.3. Amygdala and Hippocampus**

The amygdala is responsible to assess the emotional importance of the stimuli experienced. *"The amygdala plays an important role in the mediation and control of major affective activities like friendship, love and affection, on the expression of mood and, mainly on fear. The hippocampus allows the adolescent to compare the conditions of a present threat with similar past experiences, thus enabling it to choose the best option, in order to guarantee its own survival."* (Amaral et al., 2000:1). According to Cacioppo (1999:6), who agrees with this above mentioned view also feels that the hippocampus appears to be especially important in the explicit learning of emotional expectancies, whereas the amygdala appears to be important in the implicit emotional conditioning. The

growth spurt during middle adolescence is can be seen in this area of the brain. The hypothalamus forms part of the section in the brain near the amygdale and hippocampus.

#### **2.3.1.4. Hypothalamus**

The hypothalamus plays a role in emotion linked to pleasure, rage, aversion and loud laughter (Amaral et al., 2000:2). The hypothalamus is involved with the basic survival needs of human beings. *"One of the frustrations with adolescents is due to the fact that hormones, environment, and learning, make the hypothalamus region of the brain a 'hot area' in adolescent brains. The basic survival drives of the hypothalamus don't always agree with the social structure, morals and safety of society. Furthermore, the hormone, oxytocin, found in the brain during romantic relationships, tends to settle and stimulate the hypothalamus during the beginning stages of the relationship. Anyone working with adolescents knows that they are always in the midst of 'new love', which hampers logical decision making"* (Nunley, 2004: 2). McCaffrey (2001:6) agrees with the affect the hypothalamus has on adolescent behaviour and also links the hypothalamus with the regulation of hormones in the middle adolescent, which has an effect on their emotion regulation.

#### **2.3.1.5. Cingulate gyrus**

The cingulate gyrus is located in the middle side of the brain between the cingulate sulcus and the corpus callosum, the bundle connecting the two cerebral hemispheres. Amaral and De Oliveira (2000:3) declare that the gyrus frontal part coordinates smells and sights with pleasurable memories of previous emotions. This region is also involved with the emotional reaction to pain and in the regulation of aggressive behaviour.

#### **2.3.1.6. Papez circuit**

In 1937, James Papez discovered a circuit that forms the basis of emotion in his studies of brain-damaged middle adolescents (Amaral, 2002:3). He proposed

that emotion is not a function of any specific brain centre, but of a circuit that involves four basic structures that are interconnected through several nervous bundles. These interconnected bundles include the hypothalamus, the thalamic nucleus, the cingulate gyrus and the hippocampus. This Papez circuit, acting in a harmonic fashion, is responsible for the functions of emotion as well as for its peripheral expressions.

The areas affecting emotion in the brain helps the teacher and Educational psychologists understand how to create learning experiences that can relate to the middle adolescent's emotional state and will enable the learner to harness emotions in the learning process. Nunley (2004:5) feels that adolescents still need strong adult guidance to help them with decision-making throughout the developmental years and that time and good role models will allow the brain to mature to match the growth of the body.

Therefore it is the responsibility of significant role players in the school context to guide the middle adolescents in developing competencies that will help them regulate and manage their emotions and decisions they make. Continuing neurobiological research into the amazingly complex human brain will surely unlock more of the mysteries regarding the origin of emotions in the future. Various theories of emotion have also developed to elucidate the nature and origin of emotion.

#### **2.4. Theories on emotion**

Emotion consists of various modalities, such as facial expression, physiological arousal, behavioural responses, subjective feelings and cognitive processes. The sequence in which these modalities occur resulted in the development of different theories on emotion. William James and Carl Lange suggested the first influential theory on emotion in 1884. *"William James proposed that a person, after perceiving a stimulus that somehow affected him or her, endures disturbing physiological changes such as palpitations, shortness of breath, anxiety, etc. It is precisely the acknowledgement of these symptoms (by the brain) that creates*

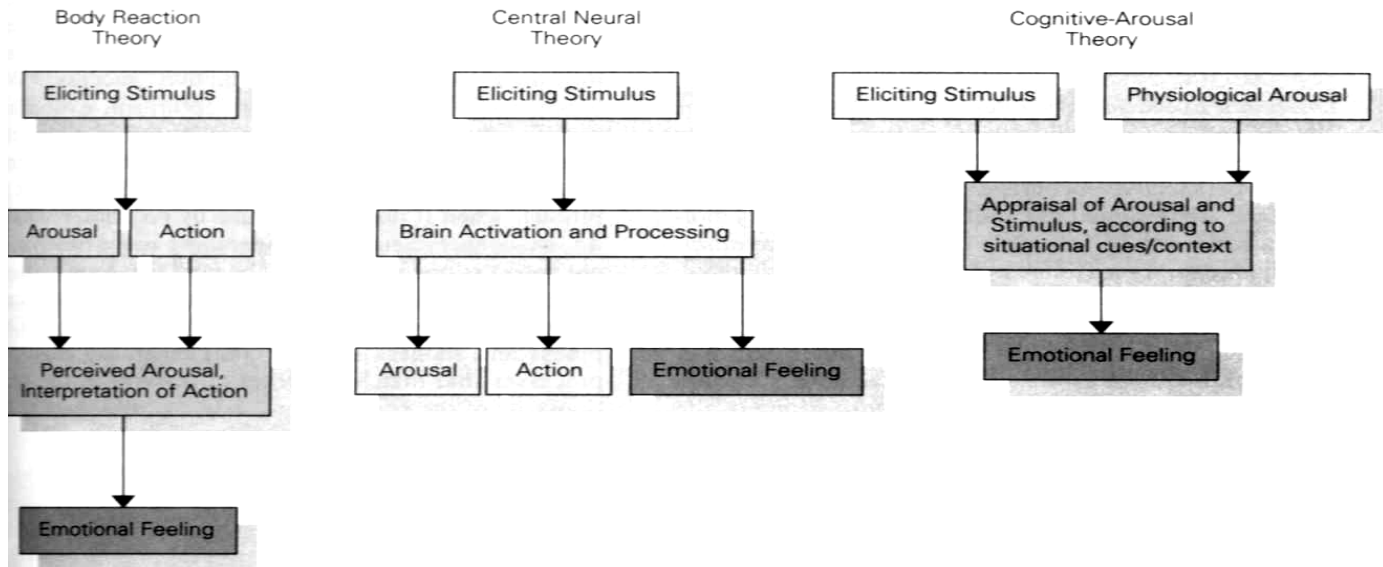
*emotion" (Amaral et al., 2000:6). Perceiving a stimulus (a threat) causes automatic arousal and actions (running away) that lead to the experience of a specific emotion (fear). According to the James-Lange theory, the emotion experienced depends on the specific behavioural changes that occur. The theory is inadequate because it does not take into account that emotions can be triggered directly by an evocative situation and not only indirectly through behavioural and physiological reactions to stimuli and that not all emotions lead to reactions.*

In 1929, Walter Cannon refuted the James-Lang theory and proposed another, which was modified by Phillip Bard and became known as the Cannon-Bard theory. *"The Cannon-Bard theory states that, when a person faces an event that somehow affects him or her, the nervous impulse travels straight to the thalamus where the message divides. One part goes to the cortex to originate subjective experiences like fear, rage, sadness, joy, etc. The other part goes to the hypothalamus to determine the peripheral physiological changes (symptoms). According to this theory physiological reactions and emotional experience occur simultaneously" (Amaral et al., 2000:6). Thus, an emotional stimulus produces two concurrent reactions, arousal and experience of emotion, which do not cause each other. In other words, the level of physiological arousal or behavioural responses does not determine the emotions. The theory lacks clarity on how the middle adolescent decides whether the situation perceived is emotionally significant and merits any reaction.*

The theories of Lazarus and Schachter-Singer shifted their focus on the influence that cognitive factors have on emotion. Zimbardo, (1992:466) describes the Lazarus-Schachter theories in terms of the joint effect between physiological arousal and cognitive appraisal, both parts necessary for an emotion to occur. Sensory experiences lead to emotion only when the stimuli are cognitively appraised as having personal significance and grow out of ongoing transactions with the environment. This theory presents the problem of assessing a middle

adolescent's cognitive appraisals of a situation because the person might not be consciously aware of the process followed to attribute meaning to a situation and emotion is not solely dependent on cognitive appraisals. The following diagram is a representation of the above-mentioned theories provided by Zimbardo (1992:467).

**Diagram 2 (With permission: Appendix B)**



It can be concluded from the various theories discussed that emotion can result from an interactive play between the factors. A synthesis of the theories could provide a more holistic perspective on emotions. A synthesis of the theories presented could be construed in the following way: firstly an external stimulus or situation is noted and appraised for its relevancy for the middle adolescent. Secondly, the middle adolescent attributes a favorable or unfavorable meaning (experience a subjective feeling) to the situation or stimulus based on the appraisal. The middle adolescent experiences physiological arousal and displays peripheral expressions. Finally, a behavioural response will follow if the situation or stimulus requires action. These factors need not follow in this exact order because emotions can occur expeditiously.

The theories of emotion will be incorporated in the Resiliency Scale for learners with questions such as "when meeting new people I know why I feel my heart

beating, stomach cramps, a lump or dryness in my throat or shortness of breath" or "I can easily tell what other people are feeling by looking at their faces and body language". The experience of emotions can be highly confusing to the middle adolescent because several emotions may be experienced at the same time between which they can often not discriminate.

Middle adolescents are characterized by being easily excited, having boundless energy and their gregarious nature are expressed through laughter and noise. However their emotions can also be easily upset by outside influences. Mwamwenda (1995:75) concurs with the idea that parents, peers, teachers and society can influence middle adolescents' emotions and states that outbursts of anger and physical violence are common. He feels that the factors responsible for adolescent's anger can be being talked about, being teased, relationship with the opposite gender, unfairness and parental interference in their associations.

Therefore, knowledge of how emotions originate can assist the teacher and Educational psychologists in making the middle adolescent aware of why they appear to have "swings" in emotion. If the middle adolescents know what triggered the emotion, the meaning they attribute to the situation and how they respond to it, the management of emotions will become easier. The following table provided by Plutchik (1996:30) is an example of the interplay between the stimulus, emotion and reaction process.

**Table 2 (With permission: Appendix B)**

| stimulus event        | cognition     | feeling state | overt behavior   | effect                  |
|-----------------------|---------------|---------------|------------------|-------------------------|
| threat                | "danger"      | fear          | escape           | safety                  |
| obstacle              | "enemy"       | anger         | attack           | destroy obstacle        |
| gain of valued object | "possess"     | joy           | retain or repeat | gain resources          |
| loss of valued object | "abandonment" | sadness       | cry              | reattach to lost object |
| member of one's group | "friend"      | acceptance    | groom            | mutual support          |
| unpalatable object    | "poison"      | disgust       | vomit            | eject poison            |
| new territory         | "examine"     | expectation   | map              | knowledge of territory  |
| unexpected event      | "what is it?" | surprise      | stop             | gain time to orient     |

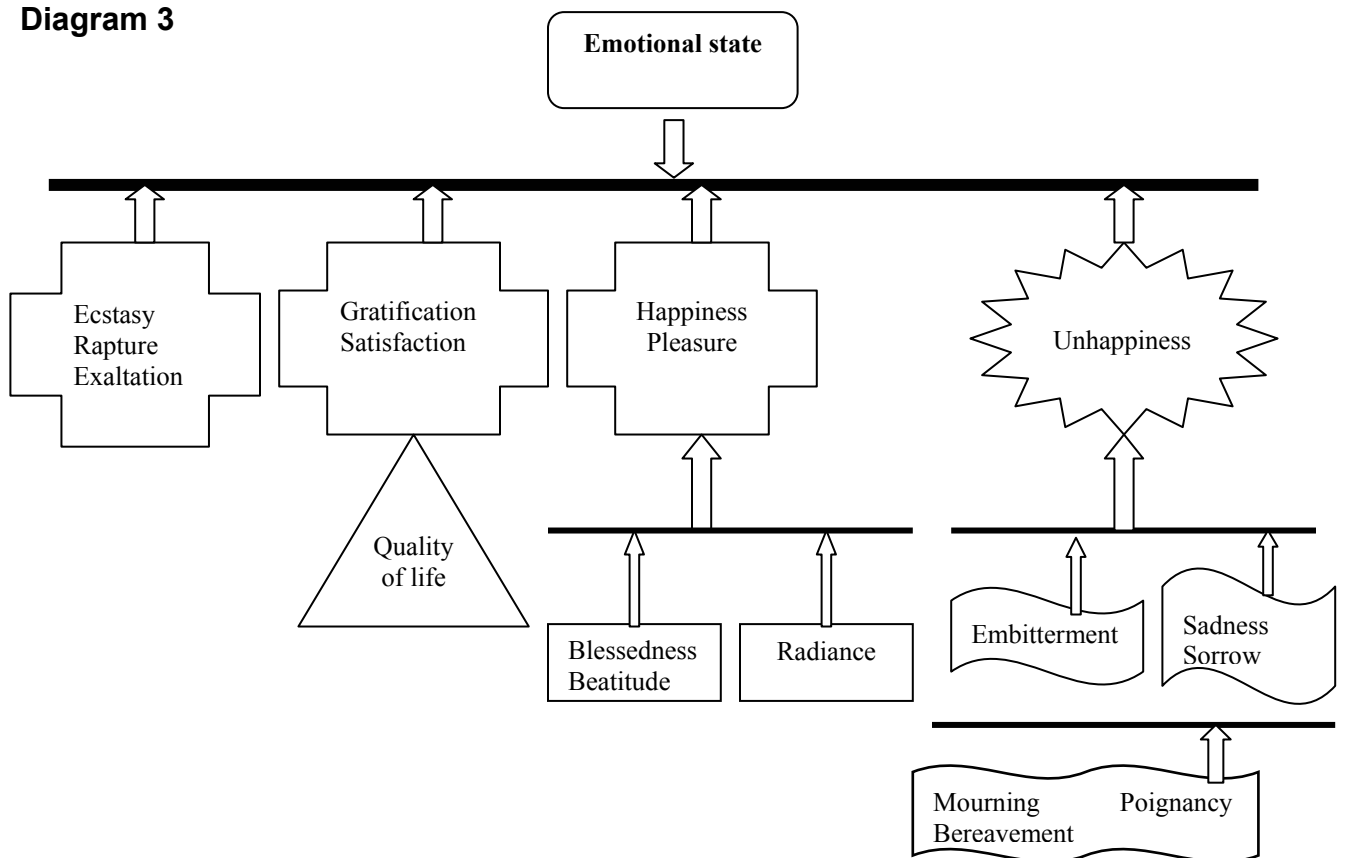
This table indicate that emotions are as intricate and complex as the middle adolescents who experience them and can have various sources of origin and reactions related to the emotion. It is important for the middle adolescents to know how their emotions affect their behaviour because the knowledge can assist the learner in managing their emotions more effectively. In order to fully understand and appreciate the effect that emotions have on a middle adolescent's life, it is important to comprehend the intricate composition and structure of emotions.

## 2.5. Emotional structure

### 2.5.1. Composition of emotions

The middle adolescent's emotional state forms a foundation of neutral equilibrium from which positive (appetition) and negative (aversion) emotions arise in a continuous way when triggered by an emotion-provoking situation. The ontological classes of attributes that denote emotional states of middle adolescents as described by Virtual Wordnet Concepts (2002:2) can be illustrated in the following way:

**Diagram 3**



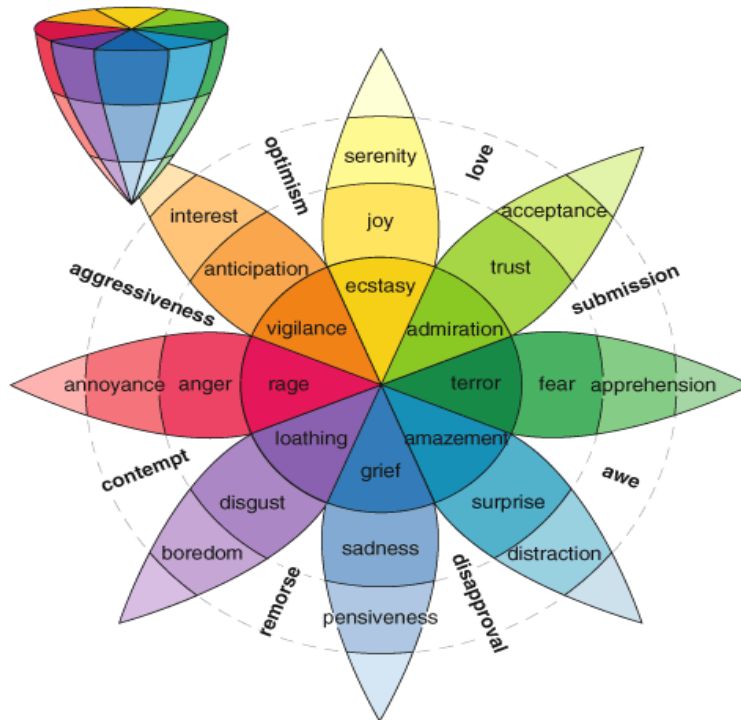


The ebb and flow of emotions arising from the information obtained through the rendition of significant occurrences and recollections of similar situations impacts on the middle adolescents' emotional state. The emotional state forms the state of mind where psychological attributes (ascribing personal significant meanings to situations), biological attributes (physiological reaction to events), value attributes (favourable and unfavourable) and the emotional tone (classification of what is experienced) are given. "*Physiological systems provide the machinery of response to internal and external stimuli by sending signals that activate or inhibit emotional responding. Physiological arousal includes neural, hormonal, visceral and muscular changes. The feelings include both a general affective state (good-bad and positive-negative) and a specific feeling tone such as joy or disgust. The cognitive processes include interpretations, memories and expectations*" (Zimbardo, 1992:460). Therefore, in making the learners aware, through the Resilience Enhancement Kit, that their interpretation and meaning attribution to situations influence their ability to manage emotions effectively empowers them to become more resilient by testing their interpretations and meaning attributions to reality and making the necessary adjustments to faulty perceptions.

The emotions differ in their intensity, the manner of arousal to act and the combination of different emotions experienced. A middle adolescent's emotions are continually in transition. Whichever emotion is currently manifested in the middle adolescent's consciousness eventually diminishes only to be transposed by another emotion. Emotions are dynamic in that the core emotions previously discussed namely fear, joy, anger, sadness, attraction and shock can lead to emotional blends and complementary pairs as well as binaries. Plutchik (1996:1) created the colour-wheel theory of emotion that illustrates this view. His three-dimensional model describes the relationship among emotional concepts, which are homogeneous to the colours on a colour wheel. The vertical expanse of the cone represents intensity, and the circle represents degrees of similarity among the emotions. The eight sectors denote that there are eight primary emotion

dimensions arranged as four pairs of opposites. The emotions in the empty spaces are the primary dyads—emotions that are a blend of two of the primary emotions. The following is a representation of Plutchik's (1996:32) three-dimensional circumplex model of emotion:

**Illustration 2 (With permission: Appendix B)**



Educational psychologists know that the middle adolescent's developmental phase is characterized by intense emotions that revolve around the self. Insight into the middle adolescents' intensity regarding their emotions are reflected through the expressions that they reveal towards adults for example that no one else has ever felt as they do or suffered so much (if punished), loved so deeply (if a relationship has ended) or been so misunderstood (if they are not allowed to do as they want). Zimbardo (1992:464) refers to Carroll Izard who corroborated the idea of emotional blends, while Heath (2001:3) further developed this theory for binaries and compound emotions. According to his theory, all emotions form into complementary pairs, or binaries. The binary characteristic means that one emotion can easily transform into its opposite. Some emotions are compound

and comprise of two simpler emotions. Examples of emotions that are binary to each other according to Heath (2001:3) could include:

- ♣ Fear-anger
- ♣ Love-hate
- ♣ Jealousy-narcissism
- ♣ Pride-guilt
- ♣ Vanity-self-pity

Examples of emotions are compound and consist of two smaller emotions according to Heath (2001:3) are:

- ♣ Jealousy (self-pity + love)
- ♣ Guilt (self-pity + self-hate)
- ♣ Pride (hatred of others + vanity)
- ♣ Anxiety (fear + vanity)

These theories on emotions assist in disseminating the identification and classification of emotions for learners. Cron (2001:66) is of opinion that the ability to articulate emotions as well as to accurately recognize and label those emotions with appropriate descriptive adjectives is important for mental health. However, he states that there are few suggestions from literature regarding methods to support the identification of emotions or to teach labels (descriptive adjectives) that name the emotions being experienced. Middle adolescents often do not have the necessary emotional vocabulary to express how they feel or to label their emotions correctly. Plutchik (1996:1) agrees with Cron about adolescents' inability to discriminate between the differences in emotions and as a result middle adolescents often resort to metaphors in an attempt to describe the emotion. He refers to the phrases "blowing off steam," "hating someone's guts," "pain in the neck," "lump in the throat" and "a broken heart" as examples of metaphors for emotions.

The identification and management of emotions require that the middle adolescent be taught what primary and secondary emotions are as well as how they are related and labeled. The questions related to intensity and emotions in the Resiliency Scale for learners could be construed as follows: "I am able to tell the difference between the intensity (degree) of my emotions for example being slightly irritated and very angry" and "I am comfortable in situations where people

show strong emotions such as love, anger or sadness. The above-mentioned theories are also useful in the development of the Resilience Enhancement Kit because the emotions can be illustrated with drawings. The relationships of emotions can be colour co-ordinated to convey levels of intensity, descriptive labels can be given to enhance emotional vocabulary and emotions can be categorized that are related. The way middle adolescents ascribe meaning based on motifs can be discussed with the middle adolescents.

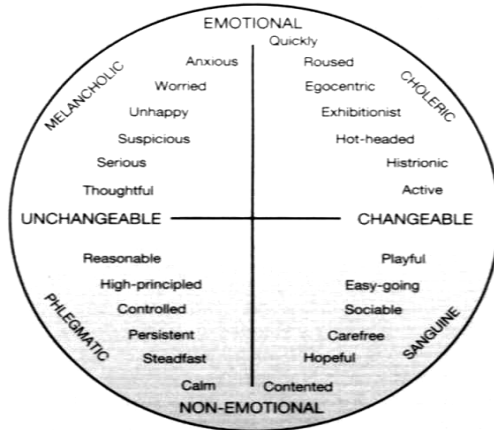
Heath (2001:4) suggests that emotions are based on motifs. "*The motif of guilt and pride is punishment or humiliation while the motif for jealousy and narcissism is responsibility. The motif for self-pity and vanity could be viewed as a cry for help. The motif of anger and fear is domination and that of love and hate is identity. The motif of resentment and bitterness is disgust and that of anxiety is oppression by one's conscience*". It can be concluded from the theories of Plutchik, Izard and Heath that emotions are multifarious in nature consisting of core emotions. Based on the intensity of the emotions felt as well as the motives of the middle adolescent the primary emotions can be attenuated into a myriad of secondary emotional blends, variations and nuances. The middle adolescents' mood, emotional composition and activation level are regulated by their temperament, which forms part of the biological basis of personality.

### **2.5.2. Temperament**

Temperament is a significant dimension of personality. Hippocrates first developed a theory of temperament, which was further explored by Freud, Allport and Eysenck. The middle adolescents' temperament has an influence on their resilient functioning because their level of reactivity towards stressful situations and problems can be either an asset or a barrier. Some middle adolescents have a warm and happy demeanour and may utilize family and friends as assets when things get tough, while others are more cautious and shy and may rather focus on internal strengths to help them rebound. Some middle adolescents appear to be strong-willed and this characteristic can be an asset if it is applied to an

appropriate situation for example not being negatively influenced by the peer group, however they can also be difficult to please which can be a barrier if they cling to negative emotions. The middle adolescents' temperament influences their level of hardiness against adversities and affects aspects related to resilient functioning such as their level of optimism, risk taking and ability to draw upon their personality style to solve problems. *"To different people, in the same situation, different modes of temperamental responses appear natural and even inevitable. The characteristics that seem to underlie the resilient individual are a sense of control, challenge and commitment. These three characteristics have been collectively defined as 'the hardy personality" (Joseph, 1994: 30).* The middle adolescents' temperament influences the ease with which they develop resilience. According to Mayer and Sutton (1996:190), it was Kant and Wundt who classified the various temperaments into a dimensional typology.

**Illustration 3: (With permission: Appendix B)**



Wundt's two dimensional representation of temperament



Eysenck's two dimensional representation of temperament

Mayer and Sutton (1996:191) state that Wundt conceptualised the typology in terms of two dimensions of emotionality. The swiftness of change dimension, which is labelled as changeable/ unchangeable, refers to how quickly a middle adolescent's emotions change. Eysenck relabelled it as introversion-extraversion. The second dimension of strength labelled emotional / non-emotional refers to the intensity of a middle adolescent's emotions. This dimension was later relabelled as emotional stability. Emotional stability refers to more than just the middle adolescent's emotional composition. It refers to the way middle adolescents cope (resiliency) and responds emotionally to authentic and imagined circumstances within their unique personality or temperament types.

An understanding of the different types of temperament that middle adolescents have is useful for the teacher and Educational psychologists in the school context because it will enable them to group the learners together whose temperaments compliment each other in order for group work to be optimized. The unique contribution and role that the different middle adolescents with their unique temperaments can bring to the group can be highlighted for example the extrovert or Sanguine personality can be the spokesperson of the group while the introverted or Phlegmatic personality can assimilate all the ideas from the members of the group. Knowledge regarding temperaments can be utilized in the Resilience Enhancement Kit where the middle adolescents are asked to work in groups, in pairs as well as participate together in games. They are also guided to respect diversity and learn from each other regarding the way that they differ in dealing with adversities as well as how to show support and respect (empathy).

Mwamwenda (1995:6) reinforces the importance that Educational Psychology brings to the understanding of individual differences that allows teachers to prepare lessons suited to learners needs and on their personality characteristics. The information provided by the Educational Psychology field can also assist the teacher to help learners to attain the achievement expected of them by modifying

the teaching approach. Another aspect related to emotional competency where Educational Psychology can inform upon is middle adolescents' emotional intelligence.

### 2.5.3. Emotional intelligence

A theory closely related to resilience, emotional and social competence is Emotional intelligence as proposed by Daniel Goleman. "*The development of resilience, emotional intelligence and social competencies in young people is not only linked to long term occupational and life success but is also associated with the prevention of substance abuse, violence and suicide. Resilience, emotional intelligence and social competencies can be best developed as a set of habits*" (Fuller, 2001:41). Emotional intelligence is the ability to navigate life by expressing, appraising and managing key aspects of functioning namely emotional, social and thought processes. Emotional intelligence skills include becoming self- and socially aware by integrating emotions and sentience as well as synchronizing emotions with reason. Furthermore, it requires self-management in order to direct actions with vision, goals and motivation to solve problems. Emotional intelligence requires social competence and skills to creatively initiate, maintain and enhance inter- and intrapersonal relationships. Goleman (1995:34) states that emotional intelligence consist of abilities such as self motivation and persisting despite frustrations; controlling impulses and delaying gratification; regulating moods and keeping distress from deluging the ability to think clearly while also empathising and hoping for the best. He (1995:48) further grouped emotional intelligence into the following qualities:

- ❖ "**self-awareness** is the ability to recognize a feeling as it happens;
- ❖ **mood management** refers to the ability to reframe, which means consciously reinterpreting a situation in a more positive light;
- ❖ **self-motivation** is the marshalling of feelings of enthusiasm, zeal and confidence which is paramount for achievement;
- ❖ **impulse control** is the ability to delay impulses in the service of a goal;

- ❖ **people skills** consist of the capacity to be socially competent and self-assertive to be able to cope with frustrations and to know how others are feeling."

Emotional, social and cognitive competencies as outlined above are all interrelated and function together to aid the middle adolescent in their resilient functioning. Goleman's theory on Emotional intelligence highlights the need for middle adolescents to be able to identify and manage emotions in themselves, identify emotions in others and showing the necessary empathy for what they are going through as well as being able to apply ego-resiliency strategies, all of which are important aspects in resilient functioning.

The middle adolescent in the school context can be characterised as testing rules and limits with an underdeveloped understanding of cause and effect as well as feelings of invulnerability and lack of taking personal responsibility for their actions. An example of this can be seen when a teacher confronts a middle adolescent when they have misbehaved in class and their reaction would be "it was not me or it is not my fault or even this can't happen to me" because they have difficulty in linking behaviour to consequences. Furthermore, a lack in impulse control, reality testing and delaying immediate gratification (aspects related to a lack in ego-resiliency) can lead to unfavourable risk taking as seen in underage drinking, drug taking and teenage pregnancies. It is important that the distinction between the concepts self-control and self-regulation that are related to ego-resiliency be clarified. Self-control refers to the middle adolescent's ability to behave according to the rules and regulations of the teacher and the school, especially in the absence of authority figures. Self-regulation on the other hand is an empowering function, which allows the middle adolescent to plan, monitor and evaluate his or her own behaviour and flexibly adapt to changing situations. This important aspect of ego-resiliency should be fostered.

In the Resilience Enhancement Kit, the middle adolescents can be asked to participate in forming the rules that all the learners need to abide by during the



sessions. The aim of including the middle adolescent in the setting up of the rules and regulations is to foster feelings of ownership in their own learning process as well as making them feel secure. The activities in the Resilience Enhancement Kit can be focused towards linking the middle adolescents' behaviour to realistic consequences by using the teacher, Educational psychologist and peers as monitors of ego-resiliency. Questions related to ego-resiliency can be included in the Resiliency Scale, which could include: "I am able to wait for a period of time before I get something I want or achieve specific goals" and "when making decisions or plans I make sure they are realistic, reachable and practical". Other questions could be stated as "I can easily change and adjust to different situations that can be stressful" and "it is important to think before you act". The development of self-regulation involves the internalization of an external example set by the teacher or psychologist. This internalization is obtained by actively engaging with middle adolescents in the social environment and explaining to them the reasons why an instruction is given and the value of the content they are engaging with in the real world as well as acknowledgement of the middle adolescents' emotions and providing emotional nurturance. The teacher can foster feelings of belongingness when middle adolescents feel part of the class; clear boundaries are set for appropriate behaviour and the teacher models empathetic behaviour towards learners.

Educational psychologists know that the middle adolescents' search to create their own identity results in them being self-involved and as a result, they have difficulty with showing empathy towards others. Furthermore, they resent criticism and negative remarks from peers and adults even though they use them towards others, which add to their lack of empathy towards people around them. The middle adolescent are also still very dependent on external motivation and although they want to work independently from the influences of adults they still want the approval of a teacher regarding their academic work which in turn motivates them to try to achieve better results. These characteristics of middle adolescents necessitate the need to develop and enhance emotional

competencies, because emotional maturity can lead to resilient functioning. *"The hallmarks of emotional maturity are the adolescent's ability to refrain from emotional outbursts in front of others, and to blow off steam in a more suitable place and in a socially acceptable way at a more opportune time. Another indication of emotional maturity is given when instead of acting rashly; the adolescent evaluates a situation critically before reacting to it. An emotionally mature adolescent also understands and empathizes with other's emotions and can accept, understand and share their feelings"* (Gouws et al., 1994:95). Teachers can help facilitate empathy in middle adolescents by modelling altruistic and caring behavior toward others and by helping them to take the perspective of others in conversations, for example, a teacher might ask the middle adolescent, "how would you feel if you were \_\_\_\_\_?" when they display uncaring behaviour such as teasing.

The aspects of emotion and empathy could be addressed in the Resilience Enhancement Kit through activities that require middle adolescents to look at situations from a different person's point of view for example dramatizing a scene, mirroring emotions and behaviour in pairs. They could also use the example from role models and even utilize music that plays an important role in middle adolescents' lives that reflect empathy. These discussed activities can be utilized because the discipline of Educational Psychology teaches that middle adolescents learn best when activities are chosen that is personally meaningful to them and they can actively participate in it. Learning also occurs through social interaction so middle adolescents need feedback to learn but the feedback needs to be accurate and useful, therefore the input from teachers and Educational psychologists to regulate, explain and direct the activities are important. The Resiliency Scale could include questions that measure the middle adolescent's level of empathy towards others, which could include "I try to understand what difficulties other people go through"; "I am able to put myself in other people's shoes" and "I try to understand my friends better by imagining how things look

from their perspective". The functions that emotions serve also form an important aspect in understanding the emotional component of resiliency.

#### **2.5.4. Functionality of emotions**

One of the significant aspects that separate humans from other species is the middle adolescent's ability to express and experience emotions. Facial expressions and body language is a vehicle of communicating what the middle adolescent's emotional reactions and thoughts are towards others, the environment and his or her self-perception. The understanding of other's verbal and non-verbal emotional cues plays an important role in establishing and maintaining social relationships. Empathy, compassion, co-operation and forgiveness for instance all have the potential to unite middle adolescents. Emotions help the middle adolescent to set boundaries, which are necessary to protect physical and mental health. When the middle adolescent feels uncomfortable with another person's behaviour, emotions act as a warning signal. Emotions determine the behavioural adaptation a middle adolescent has to respond to external and internal perceived stimuli.

The middle adolescents' ability to discuss their own emotions as well as to identify emotions in others can be ascertained by questions in the Resiliency Scale such as "I can easily tell what other people are feeling by looking at their faces and body language" and "I am able to discuss my feelings with other people". The Resilience Enhancement Kit utilizes activities where a non-threatening environment is created for learners to express their emotions and where they can learn from the behaviour of their peers through activities such as role-play, demonstration and game play. Reid (2001:171) reiterates the importance of game play in that the facilitation of an environment that is safe and boundaried where players are encouraged to share and explore their thoughts, feelings and behaviour have greatest therapeutic value. It is important however that the psychologist must address any misconceptions and encourage the

middle adolescent or the group to express themselves as well as discuss the responses of members in the group.

Emotions of middle adolescents also play an important role in motivation, retrospection (memory), learning, attention and reasoning. This is not just important in the school context but also for survival, learning new behaviour and revising learned behaviour based on similar previous experiences. Emotions play an important role in decision making because it functions as a valuable source of information that sensitises the middle adolescent regarding choices being made. This view is supported by Zimbardo (1992:465) who states the following:

*"The function of emotions serves as a motivational function by arousing us to move and to take action with regard to some experienced or imagined event. Emotions direct and sustain our actions toward specific goals that benefit us. It also helps us to organise our experiences by influencing what we attend to and the way we interpret and remember learned experiences. In addition to these functions, it amplifies or intensifies selected life experiences, which has self-relevance. Emotions can give us an awareness of inner conflicts, regulates social interaction and help to communicate what we are feeling and intending".*

Unfavourable (negative) emotions play an essential role in calibrating mental or behavioural adjustment. Favourable (positive) emotions however serve as an incentive to maintain the status quo. Evocation of emotions can emanate from motives, goals and needs as represented by Maslow's hierarchy of needs. Resilience is the middle adolescent's drive to survive the onslaughts of life, which correlates with Maslow's hierarchy of needs where human beings have a basic need to survive not only on a physical level but also on a psychological one. Furthermore, the middle adolescent has a need to belong as well as affiliated with groups where they can be acknowledged and accepted. These needs enhance their perception of their own competence, confidence and self-esteem. An increase in the middle adolescents' esteem needs will enable them to be in

touch with their emotions, build interpersonal relationships and will allow them to perceive reality accurately because they have sufficiently gratified their basic needs. Emotions guides the middle adolescent to obtain his or her goals and needs and alert the middle adolescent if needs are not met. These discussed functions of emotions create the incentive why a middle adolescent might experience an emotion, but an emotional response is dependent on an appraisal process.

### **2.5.5. Individualistic appraisal of emotions**

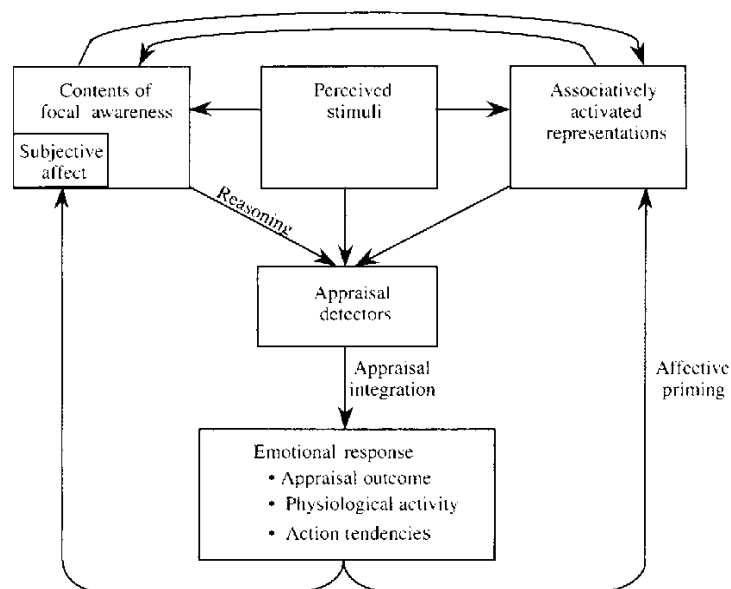
*"Appraisal theory may help to understand the ontogenetic development of emotions, which is marked by an increasing differentiation of emotional states. All theories of emotion assume, at least implicitly, that the specific kind of emotion experienced depends on the result of an evaluation or appraisal of an event in terms of its significance for the survival and wellbeing of the organism. The nature of this evaluation process has been rarely specified, even though many philosophers had shown the way by identifying some of the major dimensions inherent in the evaluations of the significance of events." (Scherer, 2001:93).*

Therefore, it is important for the teacher or psychologist to understand the aspects that give rise to emotions because it will enable them to know why the middle adolescents might react the way they do and how the middle adolescents perceive their emotions. The heightened emotionality characterized by the middle adolescent years is caused by physical, cognitive, social and moral factors and adjustment to the environment. Middle adolescents are concerned about their physical attractiveness to others and their rate of development compared to their peers. They are also concerned about their schoolwork, making and keeping friends, achieving in sports and falling in love. The middle adolescents' appraisal of events and circumstances give rise to their emotional reactions to all these above-mentioned aspects. Educational psychologists know that the appraisal process also allows the middle adolescents to evaluate how they feel about themselves as part of forming their self-concept, an important aspect of

establishing their own identity. The process by which middle adolescents begin to achieve a realistic sense of identity involves experimenting with different ways of appearance; talking and behaving to gain the approval and acceptance of their peers which in turn makes them feel good about themselves.

This appraisal process is a continuous process that has an impact on the way the middle adolescent adjusts externally (behaviour) and internally (self-concept) based on previous experience and appraisals. Every situation elicits particular emotions in middle adolescents that are relevant for that context. The degree of significance for the middle adolescents will determine the intensity of emotion, for example if they fall in love and the relationship ends, their emotion of loss and sadness will be intense. Scherer (2001:371) suggests that the process of appraisal is an integral component of an emotional occurrence. Furthermore, the appraisal consists of the evaluation of stimulus events in terms of the relevance of wellbeing for the middle adolescent; regulation of internal states to prepare for action; activation of motives and action tendencies; expression and communication of intentions as well as monitoring of changes. The appraisal process can be divided into five subsystems to explain how the emotional reaction occurs cognitively according to the theory of Scherer (2001:130) which is illustrated by the following:

**Diagram 4: (With permission: Appendix B)**



#### **2.5.5.1. The information processing sub-system**

The middle adolescent continually surveys the external environment and his or her internal state for stimuli by using the various senses, central nervous system and limbic system in the brain. The results of the perception, recollection of previous experiences, prediction regarding relationships, events and actions are evaluated in terms of their significant relevance to the middle adolescent's welfare. Responses are activated quasi-automatically, for example happiness makes a middle adolescent smile. *"The organism constantly processes information about events (external stimulation and changes in its internal milieu). The result of this processing, knowledge is stored in short-term memory. The organism constantly evaluates all this information with respect to its implications for wellbeing. This evaluation or appraisal process consists of determining the overall significance of the stimulus events for the organism (characterised by its position concerning the consequences of the events in relation to needs, motives and values of the organism) (Scherer, 2001:369).*

Middle adolescents tend to be very observant and in the school system they constantly inform each other about what is going on and they discuss relationships regarding their peers and teachers. They share previous experiences from what has been observed and evaluate how it will affect them. When a teacher is having a bad day and the middle adolescents experience it negatively, they will evaluate how it will affect them later when they go into that teacher's class and how they will react to that teacher, as well as how the teacher's reaction makes them feel about themselves (teacher's criticism).

#### **2.5.5.2. Support subsystem**

The meaning attributed to the stimuli determines and regulates the middle adolescent's internal state that prepares him or her for action. This physiological component supplies the energy for behavioural activity. If the middle adolescent for example evaluated the situation as "dangerous", then the appropriate response would be "fight or flee" as seen when middle adolescent boys fight over

a relationship with a girl. Another example would be that criticism from a peer or teacher can cause a negative emotion and can result in disorders because of a poor self-concept. Cacioppo (1999:9) states that the evaluative processors comprising the affect system are combined in order to find preferences and coordinate action. He indicates that the two specialized appraising channels that process information is threat-related (negative) and safety and appetitive (positive). In the Resiliency Scale this aspect could be highlighted by the question: "to make good decisions it is important to think about what will happen afterwards".

#### **2.5.5.3. Executive subsystem**

The middle adolescent plans, makes decisions and prepares for action by comparing the current situation to motives, plans and learned schemes. *"The associative processing is automatic. This activation can be based on perceptual or conceptual. As these memories are activated any appraisal meanings associated with them are also activated and when these meanings become sufficiently activated they can influence the person's emotional state"* (Scherer, 2001:130). An example of how middle adolescents use this subsystem is by using emotion (crying, whining or debating) to manipulate teachers and parents to do what they want them to do especially if this type of behaviour worked in previous occasions. If this type of behaviour does not work, they often tend to sulk. In the Resiliency Scale this aspect could be highlighted by the question: "I do not try to manipulate other people to get what I want".

#### **2.5.5.4. Action subsystem**

The middle adolescent communicates intentions by physiological expression and action for example a middle adolescent will imitate the peer groups' behaviour to gain their approval. *"The result of the appraisal process produces emotional episodes and when there is sufficient evidence the perceived significance of the appraised events requires adaptive action or internal adjustment. Differences in the ensuing emotions consisting of several components such as physiological*

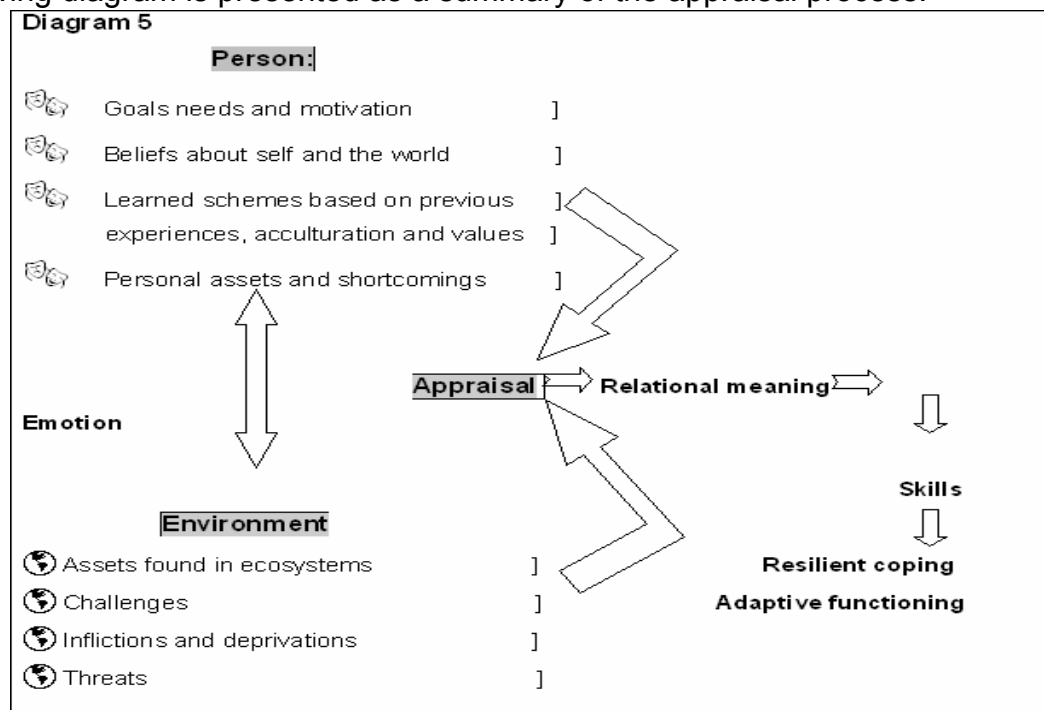


responses, motor expression, action tendencies, and subjective feeling are determined by the specific patterns or profiles of the appraisal result. "(Scherer, 2001:369). In the Resiliency Scale this aspect could be highlighted by the question: "I have the ability to control myself and apply self-restraint when I feel emotional or in an emotion provoking situation".

### 2.5.5.5. Monitoring subsystem

The middle adolescent focuses his or her attention on unresolved situations requiring an adaptive response and integrates information about internal and external events based on memory and learning. In the school context middle adolescents might associate the school with negative emotions if they experience poor academic results or lack of support from the teacher, but if they should change the way they approach their school work and as a result receive positive feedback from their teachers it could alter their emotions regarding the school or teacher. In the Resiliency Scale this aspect could be highlighted by the question: "if I don't understand something I will think about it (reflect) and ask someone for help".

Taking the discussed systems according to Scherer (2001:130) into account the following diagram is presented as a summary of the appraisal process:



This diagram shows that the middle adolescent is unique and reacts differently to the environment and relationships. *"Potential sources for individual differences in appraisal tendencies are organismic predispositions (e.g. habitual cortical arousal), cognitive styles (such as cognitive complexity), and personality traits (e.g. extraversion, rigidity, sensation-seeking). Transitory motivational states or moods are likely to affect the appraisal process as well. (Scherer, 2001:383).* This implies that the appraisal process will be influenced by the personality makeup, temperament, cultural influence and nurturing as well as cognitive capabilities of the middle adolescent. Howard and Johnson's (2003:4) summary of protective factors that influence the development of resilience as described in chapter one, can be applied to this appraisal process. In this summary personal attributes such as temperament, emotional strength and self-esteem are listed as amongst the aspects that influence the development of resilience that can also be linked to the emotional competence of middle adolescents.

Criticisms of Scherer's appraisal theory are that the focus is too cognitive. *"Many of the criticisms that have been levelled at appraisal theory, claim that it is too slow and too analytical to explain the rapid onset of certain affective reactions, especially when triggered by stimuli that are processed outside of awareness"* (Scherer, 2001:370). It must be kept in mind that the appraisal process transpires expeditiously and due to the explanation of the process, it might seem slow. This appraisal theory is of value because it enables the teacher and middle adolescent to understand what influences emotional competence.

#### **2.5.6. Emotional response patterning.**

The appraisal of emotions is an internal process with personally significant content. It must be remembered that the middle adolescent is part of an ecosystemic context that functions in a dynamic, interdependent and interacting relationship according to Donald, Lazarus and Lolwana (1997:34). This implies that the various social contexts such as family, friends, school and community

will have a direct influence on how the middle adolescent will appraise and view his or her emotions.

*"Interacting with a specific person or with the members of a group can change our goal hierarchy by making certain needs or goals more or less important or desirable and can render certain values or norms much more salient. Verbal communication or the observation of other's emotional reaction can interfere with the underlying appraisal process. Given the transactional nature of appraisal this will change the resulting emotion. The compatibility with the ideal self and with normative standards is completely determined by social factors and may vary with different social and interactional contexts." (Scherer, 2001:381).*

This statement implies that emotions emanate from social situations and emotional expressions have social functions. As social beings middle adolescents often try to modify emotional behaviour which will result in acceptance and a favourable regard by significant others and peers. The middle adolescent has a heightened sensitivity to other's evaluations of them and they become self-conscious as they try to blend into the dominant social structure. Middle adolescents learn from their parents and peers how to become adept at interpreting social situations as part of the process of managing emotional displays. They observe the emotional reaction of others to specific situations. This observation can play down or heighten the importance of a personal reaction to the same event. Manstead and Fischer's (2001:223) research concurs with this view and they mention that significant others in the middle adolescents' life are implicitly or explicitly involved in the construction of the appraisal of emotions and their reactions to the emotional event are also appraised and play a significant role in the intensity, duration and expression of the emotion experienced.

The Resilience Enhancement Kit can therefore utilize group work and information regarding role models in society in order for learners to learn from each other's life experience and shared social context. The learners are asked to function as monitors during the sessions to keep perceptions and behaviour in line with resilient functioning.

Families also help shape attitudes about emotions through their ability to identify emotions, way of interpreting events and expressing emotions. Eric Berne (Thompson et al., 1996:233) explains in his Transactional Analysis theory that the messages middle adolescents receive from significant others and self-messages originating from self-talk influence their psychological script. "*A psychological script is a person's ongoing program for a life drama; it dictates where people are going with their lives and the paths that will lead there. The individual consciously or unconsciously acts compulsively according to that program, based mostly on messages they received from parents*" (Thompson et al., 1996:233). Some of the problematic schemas families teach their children according to Sims (1996:4) could include the following:

- ❖ Always treat other people's feelings as more important than your own.
- ❖ Never do anything that might cause discord or negative feelings for someone else.
- ❖ Do not express anger or sorrow.
- ❖ Ignore your feelings, or better still, do not feel because feelings get in the way.
- ❖ Do not trust others with your feelings keep them to yourself.
- ❖ Never trust feelings only your logic.
- ❖ Be happy all the time.

These schemas can also be gender specific for example, females are more emotional than males and boys are taught that expressing emotion causes embarrassment ("big boys don't cry"). The schemas that families abide by originate from culture. Different cultures emphasise some emotions more than

other emotions due to their relative importance for that culture. Mesquita and Ellsworth (2001:223) came to the same conclusion and state that "*some qualities of emotional experience may be culturally idiosyncratic and therefore strange to members of a different culture, while others may be culturally general and therefore more easily understandable*". From a middle adolescent's behaviour, learned emotional schemas can be inferred.

Supporting the schemas is dimensions, which according to Lawson (2002:2), a middle adolescent might typically use to explain why an auspicious or detrimental event happened "*our attributions can be global, specific, permanent or temporary as well as internally or externally based on pervasiveness, permanence and personalization*." Sims from the University of Illinois (1996:2) also examined these dimensions and found that emotional responses could be based on:

- ❖ Dichotomous thinking: interpreting events in extremes, "all or nothing" ways.
- ❖ Excessive personalization: automatically concluding that another's behaviour or mood is a direct response to you.
- ❖ Overgeneralization: seeing an event as having more impact in more areas of your life than it truly does.
- ❖ Filtering: magnifying negative events in your life and discounting positive ones.
- ❖ Emotional reasoning: concluding that what you feel must be the truth even if it is skewed view.

These schemas form the rational and irrational beliefs that have an influence on a middle adolescent's expression of emotions, motivation, behaviour and thought processes (cognitive competence). In keeping with learned schemas, middle adolescents will express and describe their emotions by making use of metaphors and similes. "*We found that longer messages were created for negative emotional states, a wide variety of figurative expressions were used to express intense emotional states*." (Fussell, 2002:2). The middle adolescents will often express themselves through slang language for example feeling "bummed

out" or "cool". In using this type of language, the middle adolescent can relate to each other. The use of body language is also an expression of emotion for example keeping to cultural schemes boys will often react physically if they are upset while girls will resort to crying and complaining. Through language and non-verbal communication, middle adolescents structure their understanding of the world and express their inner emotional state. Teachers and psychologists must be knowledgeable and aware of the development of emotions, emotional expressivity and aspects such as schemas, which influence the middle adolescent so that they are able to assist the middle adolescent when they are in need of support.

The group work in the Resilience Enhancement Kit enables the learners to gain insight into the cultural schemas of emotional behaviour. The learners are given the opportunity to discuss and demonstrate the differences in cultures of expressing emotion and communicating verbally and non-verbally. The knowledge and skills gained is necessary to assist the middle adolescent to become resilient in a widely diverse society.

## **2.6. Psychological appraisal of emotions**

In the 1960's, Magda Arnold set out to measure emotion. She used the Thematic Apperception Test (TAT) to analyse emotion. Schorr (2001:331) describe this psychological test as *"the first of a series of emotional experience questionnaires used in the late seventies consisted of pictorial representations of the typical facial expressions of four basic emotions labelled joy/ happiness/ pleasure; sadness/ sorrow/ grief; fear/ fright/ terror and anger/ bad temper/ rage. They used event-orientated questions about the emotional response"*. This type of measurement was not satisfactory and language became the sole stimulus measure. Although subjective measurements like self-report questionnaires and self-observation are often ridiculed based on reliability and validity, objective measurements do not always elicit the middle adolescent's unique emotional response to a particular situation. Schorr (2001:333) also felt that objective

measurements are limited in the dimensions they describe and subsequently provide a lesser amount of information than subjective measurements that require the respondent to describe and recall an emotional experience. The use of a combination of different research methodologies is considered the most promising for the appraisals of emotion. According to Scherer (2001:387) the experimental methods, in-depth interview, rating-scale and the reproduction of past emotional incidents from memory through questionnaires as well as the collection of real-life observational data and self-reports during the natural occurrence of emotional incidents, are the most promising methods to obtain a holistic image of the middle adolescent's emotional functioning. The Resiliency Scale encompasses a rating-scale based on the middle adolescents' self-reports on their everyday functioning as well as observation to assist them in identifying their level of resilience as well as utilizing these methods for self-reflection.

The introduction of experimental methods such as exposing middle adolescents to images, music, slides and films by some researchers to obtain an emotional reaction could result in undesired unnatural emotional reactions to those events. The cognitive simulation of emotion evoking situations and then asking participants to rate the intensity thereof also forms part of experimental methods. *"The interview as a retrospective method of collecting emotional experiences offers many opportunities to interactively question the subject and thereby inquire about further details. When compared to questionnaires, it is less standardised, requires more research resources and is more time-consuming. Chances increase that responses collected in interviews may be distorted not only by social desirability effects or response questions but mainly by a lack of openness due to missing anonymity"* (Schorr, 2001:335). It is possible that middle adolescents who are faced with in-depth interviews will not want to express negative, socially non-conformant emotions because they could believe that it would tarnish their image projected to others. It is preferable to use questionnaires in appendage to interviews and other self-report methods because the results of these methods can be compared to obtain reliability and

validity of conclusions drawn. Schorr 's (2001:337) critique of questionnaires is that *"these very simple instruments investigate the relevant features of the emotional process in such detail that the responses hardly allow any conclusions as to whether or not the aggregated data correctly represent the middle adolescent's emotional experience."*

Another question arises as to the authenticity of retrospective emotions and events from the past. Schorr (2001:337) is of opinion that time dilutes the intensity of emotions experienced and that details can easily be omitted due to the rearrangement and reinterpretation of events. Real-life observation and the recollection of recent experiences are the ideal means of studying emotion. It is important when appraising emotion that the emotion-eliciting situation and middle adolescent differences must be taken into account. *"In emotion appraisal studies, participants are asked to indicate their feeling state with the help of rating scales on which they have to rate the relative intensity of several emotions. Generally, participants make use of such multiple specifications of their emotional reactions, indicating differential intensities for two or more emotions. So far, there does not seem to be an appropriate method to analyse these emotion blends in a statistically satisfactory way"* (Scherer, 2001:387). Based on the critique of Scherer on eliciting information on emotional blends and binaries Fussell (2002:2) suggested the following psychological tests to ascertain emotional state:

- ❖ Emotional State Rating Scale (ESRS) based on Osgood Semantic Differential. This scale requires subjects to rate an emotional experience along a variety of dimensions, which can be factored into three dimensions: intensity, activity and valence (good/bad).

Cacioppo (1999:2) suggested the following measures of assessing emotion:

- ❖ Continuous self-report measures and observations.
- ❖ Retrospective verbal protocols.
- ❖ Nonverbal pictorial assessment techniques.
- ❖ Facial electromyography.



- ❖ Behavioural Approach System / Behavioural Inhibition System measure. It is a self-report instrument designed to assess adolescent differences in the tendency to approach or withdraw and to experience accompanying affective states.

The National Institute of Mental Health (1999:1) further investigated means by which emotions can be ascertained and suggested that Neuro-imaging (Positron Emissions Tomography and magnetic resonance imaging) could be used to see the living, thinking, feeling human brain when emotions happen.

It must be remembered that psychological tests are devices that the Educational psychologists use to aid him or her in identifying strengths and weaknesses that the middle adolescent exhibits in order to use the information for prevention, rectification, rehabilitation and development of support measures in schools. In support of this view Cacioppo (1999:2) stresses that "*the research of emotion state, developments are needed that test specific conceptual hypotheses based on field sampling methods and ambulatory assessment and intervention programs in conjunction with these methods*". In this research therefore, the information gained from the adolescents' emotional state (strengths and weaknesses) as a modality of resilience will aid in developing a Resiliency Scale that could measure the emotional resilience in the school context.

## **2.7. Emotional resilience and school context**

The shift in the South-African education system to become more outcomes based stems from a focus on holistic learning and optimal school functioning. This implies that not only the cognitive aspects of learning have to be developed and enhanced but the social- and emotional aspects of a learner as well. It becomes evident by observing learners that if a middle adolescent experiences some form of emotional lability, they are incapable of functioning optimally. Lawson (2002:4) agrees with this perspective and feels that due to difficulties in management of emotions middle adolescents' emotional problems are manifested as behavioral problems. He explains that middle adolescents tend to

externalize or over-control (internalize) their emotions because they are too sensitive. Over sensitivity can lead to withdrawal from others or acting out and poor school performance can also reinforce feelings of anxiety, sadness and low self-esteem. Unfavorable emotions can disrupt thinking and prolonged emotional distress can suppress a middle adolescent's ability to learn.

The connection between emotions and cognition is not adversarial but these processes function together. The important link between emotions and learning is described by Lawson (2002:5) as follows: *"emotions and learning occur in the brain. Our thoughts influence how we feel. How we feel influences how we think. The connections between emotion and learning are bi-directional and complex. We think about an incident and our mood changes. Emotions are the relay stations between sensory input and thinking. When the input is interpreted positively, we are motivated to act and achieve a goal"*. Therefore it is of the greatest importance that the middle adolescent learn how to manage their emotions effectively.

Adolescent development is characterized as a turbulent time and it is important that middle adolescents develop emotional competencies to cope with the challenges and stressors they are confronted with in their social environment that includes the school context. In order to identify and label their emotions accurately, middle adolescents must learn to pay conscious attention to them. Without this self-awareness, middle adolescents will continue to describe their emotions as "good", "bad" or "okay". When middle adolescents are able to specify that they feel "anxious" about an upcoming test or "sad" about being reprimanded by a teacher, then they have identified the source of their emotions, which can lead to discovering options to resolve their problem. The middle adolescent with the support of a teacher or psychologist can constructively do something about the cause of the negative emotion.

However, if the emotions become uncomfortable enough and the source is undefined, they may seek to numb their emotions with alcohol or other drugs, to overeat, or to withdraw and become depressed. Middle adolescents who feel angry may take out their anger on others or themselves. Sims (1996:4) stresses the importance of learning to experience emotions fully and expressing them in ways that are adaptive and salubrious. He states that the middle adolescents should become good observers of their emotions and accept, value and attend to what they signal by learning how interpretations and thoughts affect emotions and also how learned schemas from the family about emotional expression continue to influence their behaviour. The school context is an ideal environment where the middle adolescent can learn emotional competence taught and modelled by teachers and Educational psychologists.

The teacher can support the middle adolescent in developing emotional resilience by reflecting the mood of the middle adolescent in the classroom for example if the middle adolescent seems enthusiastic or sad, responses should reflect that the teacher understands and acknowledges the middle adolescent's emotions. Reflecting the middle adolescents' mood helps them feel understood and valued. The characteristics of teachers and Educational psychologists that foster emotional resilience include being compassionate and sympathetic, a good role model who is trustworthy and reliable, a good listener and observer and someone who expresses a positive attitude. *"Teacher's personality can contribute to his or her effectiveness. It has been shown that good teachers who are liked by pupils have the following characteristics: co-operative, democratic attitude, kind, considerate, patient, fair, impartial, broad interests, a sense of humour, interest in pupils problems, flexible, pleasant disposition and consistent behaviour. Good teachers should show warmth and empathy and a caring attitude toward their pupils"* (Mwamwenda, 1995: 504). Thus, the way teachers and Educational psychologists express themselves non-verbally and through the verbal use of precise terminology of emotions and non-verbal communication of emotions can help the middle adolescent learn how to identify and label

emotions. Recognizing and expressing emotions lays the groundwork to recognize emotions in others.

Furthermore, teachers and Educational psychologists need to be transparent, if they are having a bad day, the middle adolescents need to be made aware of it in order for them to give the teacher the time and space to deal with the difficult situation. Teachers should also ask the middle adolescents to tell them when they are having a bad day so that the teacher can make allowances for them because in this way the teacher and middle adolescent can learn and show empathy towards each other. Honesty, openness and living by example allow the teacher to create a classroom environment where the middle adolescents are able to meet their needs for care, safety and expression in a way which fosters emotional competence. Encouraging middle adolescents to discuss and think through the ethical and moral issues that can be found in the news allows for the development of different points of view and empathy.

A further aspect of emotional competence of importance in the school context is ego-resiliency. Ego-resiliency is the middle adolescent's ability to self-regulate and manage actions, thoughts, and emotions in adaptive ways. Middle adolescents who exhibit a lack in ego-resiliency often engage in dysfunctional conduct, for example being withdrawn, isolated, off-task, out-of-seat and show disruptive behaviors in class. The teacher can foster ego-resiliency by reinforcing the appropriate ways to express emotions, delay behaving impulsively and seeking immediate gratification. *"Reinforcement plays an important role in observational learning. If a person is rewarded for a particular behaviour, the chances of this behaviour being modelled are higher. Teachers can reinforce pupils by commenting approvingly on their work, smiling, rewarding them, showing interest in them and accepting them for what they are"* (Mwamwenda, 1995: 205). Thus, due to the fact that middle adolescents spend a lot of time in the school environment with teachers who can attend to the physical, social and psychological aspects resilience can be fostered by incorporating it in the

learning process. As discussed in this chapter as well as outlined by the work of Benard (1995:1); Henderson (2002:3); Rouse (1998:2); Jew, Green and Kroger (1999:2) as well as Mangham, McGrath, Reid and Stewart (1995:8) in chapter one, emotional competencies inherent to resilience that should be fostered in the school context should include the ability to identify and manage emotions, showing empathy and exhibiting ego-resiliency. The practical application of emotional competence will be discussed in chapter five for the school context.

## **2.8. Conclusion**

In this chapter, the nature and origin of emotions as well as emotional state were discussed. It was found that emotions consist of different intensities and can consist of combinations (binaries) which result in primary and secondary emotions. Emotions affect all areas of a middle adolescent's life and it is shaped by temperament, emotional intelligence as well as parental, cultural and social influences. The school is one of the most important contexts where the middle adolescent spends his or her time. The school can exert a fundamental influence in developing the middle adolescent holistically. To be well-integrated middle adolescents, it is necessary that emotional competencies be developed as well as an introspective awareness of personal emotional states. Emotions will therefore be vitally important in developing into a resilient middle adolescent by identifying, expressing and managing emotions. The middle adolescents' emotional competence is appraised based on self-reports, interviews and rating-scales because of the meaning middle adolescents ascribe and link to their emotions. Focusing on the emotional- and social wellbeing of middle adolescents in schools, support efforts in developing resilient citizens in a rapidly changing society. The next chapter will focus on the development of the social competencies in resiliency.

## CHAPTER 3

### **The nature, characteristics, development and appraisal of social competencies in middle adolescents within the school context.**

*"If social intelligence is the ability to read the dynamics of a relationship or social setting then social competence is the ability to respond creatively to what one finds"*

*(Fuller quotes Egan, 2001:41)*

#### **3.1. Introduction**

Life consists of a continuum of social events and relationships. Middle adolescents cross the threshold into a social world at birth and journey through this world by successfully manoeuvring through the labyrinth of social situations and relations they encounter. The way in which a middle adolescent thinks, feels and acts are influenced by the interaction and membership to families, friends and organisations; it forms part of the adolescent's anthropological essence of co-existential involvement. *"People are seen as shaped by and as active shapers of their social context. Thus, how we develop as individual persons is linked to the social structures, forces and relationships which make up our environment"* (Donald et al., 1997:34). In this light it is noteworthy that middle adolescents not only have to create a personal identity regarding who they are, but they must also form a social identity regarding their role and relationship with the members of the society in which they live. The formation of a social identity requires the ability to utilize social competencies to effectively interact, develop and sustain relationships with people and the environment.

An essential part of resilience is the middle adolescents' social competencies. Social competence encompasses learned behaviours that include cognitive and emotional processes, verbal communication and non-verbal behaviours that a middle adolescent uses in interpersonal situations and relationships. Weare and

Gray (2003:23) stresses that middle adolescents' behaviour is a consequence of their social and emotional development and reflect their mental health. Therefore behaviour is the communication of their emotional states and their application of social competencies which can be learnt. Social competencies forms part of the adolescents' resilient abilities that can be enhanced and with which they master social situations, relationships, interpersonal actions as well as potentially inflammatory stressors they might encounter. In the exploration of social competence as a facet of resilience, this chapter will briefly touch on the biological origin of social competence as this is not the main focus of the research but still relevant to understand the middle adolescent holistically.

Educational psychologists study behaviour and the mental processes of the brain to gain an understanding of how inherent biological factors can influence the behaviour of middle adolescents. Mwamwenda (1995:2) reiterates the importance of knowledge regarding brain functioning for understanding of behaviour as follows: "*to remain scientific in our research of psychology we concern ourselves with the observable and measurable. The role of the brain can therefore be inferred on the basis of behaviour*". This chapter will also address the development of social competence that can be influenced by the social environment, taxonomy and theories surrounding the construct as well as the appraisal thereof.

### **3.2. Defining terms related to social competence**

Social competence is a convoluted construct that requires elucidation due to the interchangeable use of the term with social skills and social intelligence. Although these terms are interrelated they are independent in their essence. Social cognition or intelligence can be conceptualized as the mental process with which middle adolescents think and reason about their social world, the people they interact with (family, teachers, peers and significant others) and the relationships with those people and groups in which they participate. Kihlstrom and Cantor (2000:44) define social intelligence as the middle adolescents' ability to get along

with others, their knowledge of social matters and how to respond to that as well as susceptibility to stimuli from other members of a group and insight into the underlying personality traits of strangers. Therefore observing the interaction with others is an indication of the middle adolescents' social intelligence.

One of the most noticeable changes in middle adolescence is the shift from the family influence to the peer group. Through identification with peers, middle adolescents begin to develop social judgements and values. Peer groups serve as dominant enforcers of what is socially acceptable and how middle adolescents need to behave. The authors Kihlstrom and Cantor (2000:29) are of opinion that social intelligence consists of three constituents namely that of social sensitivity, reflected in role-taking and social inference; social insight (social comprehension, psychological insight and moral judgement) and social communication as well as social problem solving. Social behaviours are an entwined network of verbal communication and non-verbal actions used in reciprocal interactions and interpersonal exchanges that require appropriate social skills to convey the desired meaning of the message.

Defining social skills can be problematic due to different viewpoints regarding what is considered as being effective and appropriate behaviour within various contexts. *"The difficulty in providing an adequate definition of social skills is partly because the construct is deceptively simple, yet relies heavily on a number of other psychological constructs and basic human traits such as personality, intelligence, language, perception, appraisal, attitude and behaviour-environment interaction necessary for their acquisition and performance. Each discipline such as Social work, Education, Psychology etc. has its unique perspective to define social skills"* (Merrell & Gimpel, 1998:3). For this reason, social skills refer in this research to the goal-directed social behaviour governed by social norms that allows middle adolescents to accurately perceive and effectively interact with others in their environment. The authors Merrell and Gimpel (1998:3) quotes Michelson, Sugai, Wood and Kazidin who proposed an amalgamation of the



different rudiments of various definitions regarding social skills into the following components:

- ❖ Social skills are principally acquired through learning (including observation, modelling, rehearsal and feedback from role models). These role models in middle adolescents can be the peer group and media.
- ❖ The skills include particular and distinctive verbal and nonverbal behaviours.
- ❖ Social skills include efficacious and apposite initiations and responses that are interactive and focus on the reinforcement of apt behaviour.
- ❖ The execution of these skills is shaped by the attributes of the participants and the environments in which it occurs (situation-specific).
- ❖ Social skills can be enhanced and developed.

Simon (2003:2) expanded on the previous authors' view on social skills and feels that it can also be seen as patterns of behaviours that someone has that result in either positive or negative reactions from other people or in successful or unsuccessful outcomes in social situations. Simon (2003:3) further divided these social skills into five main areas:

#### ✘ **Verbal Communication**

- ❖ This includes the middle adolescents' ability to use and understand words effectively when speaking to others as well as their ability to modulate tone and volume of their voice to adapt to the situation.
- ❖ Exhibiting a sense of timing in a conversation.
- ❖ The ability to use appropriate topics of conversation suitable to the context.

#### ✘ **Non-Verbal Communication**

- ❖ The middle adolescent's ability to understand what his or her body language is communicating and correctly interpreting the body language and facial expressions of others.
- ❖ The ability to use appropriate eye contact and facial expressions to convey interest or emotional reactions when listening to others.

### ✘ **Social Behaviours**

- ❖ Appropriate social behaviours include being on time, being organized and attentive.
- ❖ Furthermore it includes being well groomed and having good hygiene.
- ❖ Being responsible for the upkeep, running and care of one's own personal living space is an important social behaviour.
- ❖ The middle adolescent's ability to make independent, appropriate and informed decisions and ability to set realistic goals is important.

### ✘ **Interpersonal Interactions and Relationships**

- ❖ Feeling confident when meeting new people and knowing what to say and how to say it is evidence of social skills.
- ❖ Having a sense of comfort and adaptability in social situations such as parties and social gatherings and knowing how to appropriately interact with people who provide services, such as teachers and psychologists show appropriate social behaviour.
- ❖ It is important for middle adolescents to know how to interact and communicate respectfully with adult figures such as teachers, psychologists and doctors with self-confidence.
- ❖ Developing relationships with family members or caregivers that are interdependent versus primarily dependent and maintaining peer friendships at school and outside of school, make up an important part of middle adolescent's social skills.

### ✘ **Academic and Professional Functioning**

- ❖ Middle adolescents must exhibit an ability to achieve academic potential in school by having a realistic sense of their own strengths and weaknesses.
- ❖ Being able to behave and pay attention in the classroom and listening to and following directions is crucial social skills in the school setting.

- ❖ Furthermore having the skills to perform a job successfully for example being on time, taking responsibility for duties, having positive relationships with peers and communicating with the teacher shows appropriate social skills.

Social skills can therefore be seen as the outcome of utilizing and applying perception, knowledge and reasoning to a variety of social behaviours that are appropriate to a given interpersonal context. Middle adolescents who have an extensive repertoire of social skills and who are socially attentive and discerning are likely to be socially competent. Merrell and Gimpel (1998:9) summarize social skills as *"specific behaviours that an individual must exhibit to perform competently on a given task. Social competence is also an evaluative or summary term based on conclusions or judgements that the person has performed the task adequately. These judgements are based on the opinions of others (peers, parents, teachers and cultural or comparisons to some explicit criteria or normative group"*. Social competence must therefore be seen as the super ordinate concept to social skills.

Social competence can be observed on a daily basis, but the intricacies are difficult to capture due to the interwoven transactional process that encompasses emotions and cognition. Social competence includes a complex arrangement of social learning, motives, social abilities, skills, habits and knowledge that determines social behaviour. Odom, McConnell and McEnvoy (1992:7) state that social behaviours are the building blocks of interaction with others and the foundation upon which social competence is based. Social competence is the middle adolescent's ability to select, actively engage and reflect on the appropriate actions within a culture-specific context that will lead to the establishment, maintenance and development of interpersonal relationships and the attainment of goals and tasks by effectively integrating and utilizing cognition, emotion and behaviour. *"Social competence is the ability to understand, manage and express the social aspects of one's life in ways that enable the successful management of life tasks such as learning, forming relationships, solving*

*everyday problems and adapting to the complex demands of growth and development. The behaviour to achieve social tasks and outcomes valued in a host context and culture such as a school setting would include assessing the school curriculum successfully, meeting associated personal, social and emotional needs and developing transferable skills and attitudes of value beyond school"* (Elias et al., 1997:2). The middle adolescent applies his or her skills, capacities, motivations, knowledge and personality attributes, all of which interact with the immediate social context such as the school to reflect the quality of his or her social interactions with family, peers and significant others. Fuller (2001:40) identified the key social competencies that underpin resilience as follows:

- ❖ Attending to others, observing the cues (facial, tone, posture) that signify how others are feeling and what the norms of behaviour are in various social contexts;
- ❖ the accurate interpretation of social cues (reading, intentions, empathy);
- ❖ the generation of solutions to problems (perspective taking, moral reasoning);
- ❖ the realistic anticipation of consequences;
- ❖ transforming social constructs into appropriate habits (approaching others, asking questions, conversing with others);
- ❖ developing self-efficacy and optimism (regularly seeking out positive experiences);
- ❖ connecting with people to create a sense of belonging;
- ❖ ability to solicit and utilize social support.

An extensive taxonomy of social competence will be discussed later in this chapter. The Resilience Enhancement Kit incorporates these above mentioned social competencies and allows for middle adolescents to practice the skills through mirroring, role play and group work. The brain is without doubt the most complex organ in the human body and the cradle of social competence.

### 3.3. Nature and origin of social competence

The brain is the wellspring of human functioning and a comprehensive discussion of social competence would not be complete without briefly considering the biological origin of social behaviour and competence in middle adolescence. Geake (2003:6) is of opinion that during adolescents frontal cortices undergo a growth spurt of new neurons and new connections that have practical applications for teachers in promoting classroom practices that engage frontal brain functioning. He suggest activities that include involving sustained attention, (solving maze puzzles), integrating and organising information (crossword puzzles), planning (organising fund-raising), meta-analysis (reading a play or novel for sub-text) and meta-cognition (in keeping a reflective diary). Knowing the location of social functioning in the brain, teachers and psychologists are able to develop activities related to the functioning of that part of the brain.

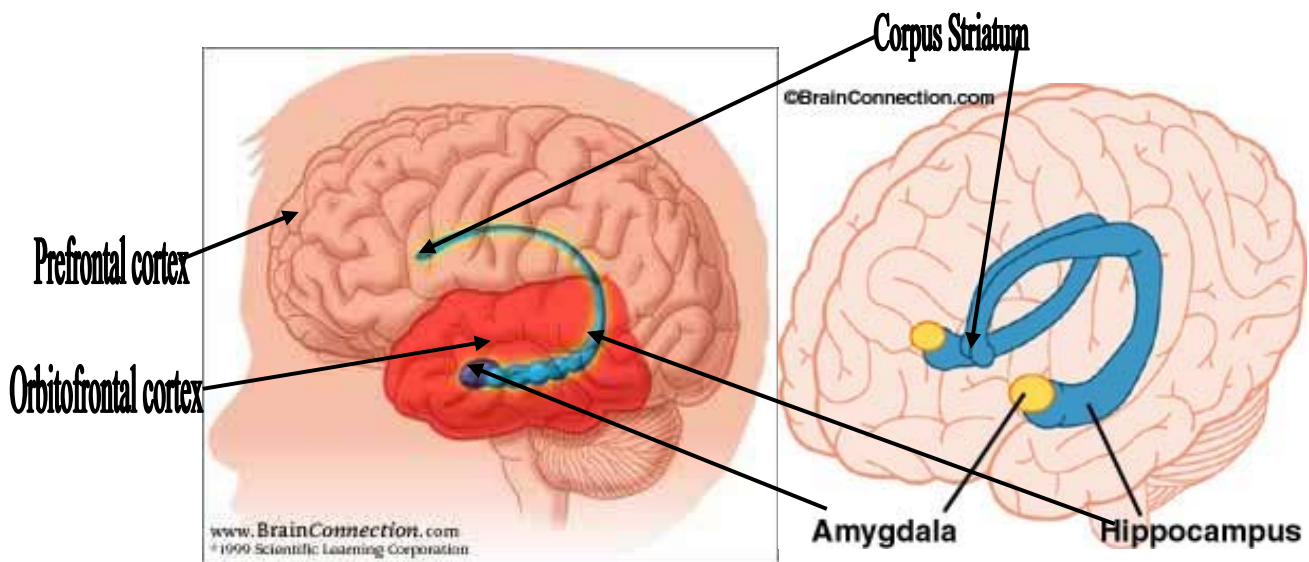
The Resilience Enhancement Kit could include activities that can reinforce the neural pathways for social resilience for example utilizing music that reflect appropriate social behaviours because the auditory processing are located in that section of the brain. Other activities in the Resilience Enhancement Kit could also include working in a group to plan and execute a project relating to forming relationships and utilizing a situation analysis to answer questions where the middle adolescent can apply the skills learnt about rebounding in relationships. Sylwester (2003:2) reiterate the importance of brain development in middle adolescents that affects social competence and indicate that the final maturation of reflective behaviours occurs during adolescents and early adulthood.

Social competence has multiple foundations in the brain structure. The success of social interaction depends on the development of brain systems that are engaged to processing information related to social interaction. *"Social intelligence and social competency's neurological substrate involves a balanced or integrated cortical subsystem which relies on long-term memory to make complex social judgments; a frontal dominant subsystem which organizes and*

*generates social behaviours and a limbic-dominant subsystem which rapidly produces social-emotional responses to events" (Kihlstrom et al., 2000:13). The frontal lobe, in particular the prefrontal cortex is the anatomical region most associated with adaptive social behaviour. Sylwester (2003:2) reiterates the importance of the frontal lobe areas such as the anterior cingulate and the orbitofrontal cortex in developing and regulating social behaviour.*

### 3.3.1. Areas in the brain involved with social competence

Illustration 4: (With permission: Appendix B)



#### 3.3.1.1. Prefrontal cortex situated in the frontal lobe

The front of the brain, behind the forehead is important for executive functions like planning ahead and anticipating the consequences of one's actions. *"The principal frontal lobe capabilities include devising a useful solution to a novel challenge; developing effective cognitive routines to use when confronted by familiar challenges and the ability to anticipate the motives, intentions and behaviours of others. It forms the basis of judgments and spontaneity in interacting with others" (Sylwester, 2003:2). Lieberman, Iacoboni, Knowlton, Molnar-Szakacs (2002:12) further explain the function of the prefrontal cortex, as it plays an important role in analyzing social relationships and considering the*

implications of those relationships by referring to the following "*the prefrontal cortex sustains effective social relations by unreflective day dreaming and conscious meditation on the potential implications of past social events imaging solutions to social relationship problems and explicitly and implicitly planning for future eventualities.*" The prefrontal lobes of the brain have been associated with behavioural inhibition, the ability to control emotions and impulses as well as the area where decisions about right and wrong, cause-effect relationships are processed. Talukder (2000:1) emphasizes the fact that while adults can use rational decision making processes when facing emotional decisions, middle adolescent brains are not yet equipped to reason in the same way and judgement cannot be learned if the brain does not have the capacity to incorporate it. For example, when deciding whether to ride in a car driven by a drunken friend, an adult can usually suppress their desire to conform and is more likely to make the rational decision against drunk driving. However, a middle adolescent's immature frontal lobes may not be capable of such a rational approach and the feelings of friendship may be likely to overcome any levelheaded decision.

Middle adolescents are characterised by exhibiting social behaviour such as risk-taking and impulsive behaviour by participating in activities that can be associated with "thrill seeking" or communicating what ever comes to mind without considering the consequences. Crum (2003:2) agrees with the views held by Talukder regarding the maturity level of the prefrontal cortex and state that adolescent behavior is not simply a matter of willful stubbornness or determination to annoy parents and teachers but that thinking and reasoning impact their behaviour which is guided by the underdeveloped prefrontal cortex. The decision making centers of the brain continue to develop in the adolescent phase and the middle adolescents can be guided by teachers and psychologists to manage their social behaviors in an appropriate way. The Resilience Enhancement Kit is therefore important in assisting the teachers and

psychologists to guide middle adolescents effectively. The corpus striatum and amygdala are the second important brain area that regulates and equips the middle adolescent to effectively function socially.

### **3.3.1.2. Corpus Striatum and Amygdala**

The corpus striatum forms part of the basal ganglia that is the largest subcortical structure in the brain. The caudate nucleus is bounded on one side by the lateral ventricle and is divided into a head, body and tail. It contains endorphins that produce a positive emotional state. Emery; Capitanio, Mason and Amaral (2003:3) state that the corpus striatum helps middle adolescents judge social situations correctly. The amygdala is part of the basal ganglia but it is attached to the tail of the caudate nucleus. *"The macaque amygdale is located within the anteromedial temporal lobe and consists of thirteen individual nuclei or cortical regions. It receives extensive inputs from brain areas associated with sensory modalities. Outputs from the amygdale project back to the striatum, hypothalamus, hippocampus, brainstem and areas of the neocortex associated with the control of social behaviour, homeostasis, hormonal state and physical action. The connectional anatomy of the amygdale supports the idea that this structure is involved in processing social information and in contributing to social responding. The amygdala is required for perceiving specific attributes of the face such as facial expressions and for attaching and retrieving the social meaning to facial stimuli "* (Emery et al., 2003:3). The amygdala is involved in instinctive "gut" reactions, including "fight or flight" responses as well as reading of body and facial language.

The Resilience Enhancement Kit might therefore be useful in making the middle adolescent aware of body language and facial expression (emotions) as cues for social responding. Based on the amygdala's function to regulate behaviour that applies to safety responses ("fight or flight"), the Resiliency Scale might also include a question such as "I am able to create my own safety when faced with



physical threats or when I am exposed to violent situations". The amygdale appears to be an important area in the brain for middle adolescent's social behaviour. Cooke (2004:2) emphasizes that the amygdala controls the way middle adolescent act and they do not think the way adults do because they can't do that yet. Cooke further refer to research that discovered that adults think with the prefrontal cortex (the rational part of the brain) while middle adolescents process information with the amygdale (the instinctual, emotional part of the brain). Middle adolescents for example don't think, 'Binge drinking is very dangerous and irresponsible' but they rather reason, 'a chugging contest! Wouldn't it be cool if I won?' Cooke (2004:2) observed that parents and teachers watch the middle adolescents hurtle through life manipulated by the impulses of the amygdala, home to primal emotions such as fear and rage which is further complicated by the amygdala's interaction with hormones making middle adolescents moody, unpredictable and irrational.

The influence of peer groups and relationships with significant others also play an important role in influencing how middle adolescents ascribe meaning to social situations and how they will react to gain favor with the peer group and react socially. Therefore the activities in the Resilience Enhancement Kit could focus on working in groups and building and maintaining relationships. The third anatomical region important for social competence is the limbic frontal lobe or orbitofrontal cortex.

#### **3.3.1.3. Orbitofrontal cortex (Limbic frontal lobe)**

The Orbitofrontal cortex (limbic frontal lobe) is that part of the frontal lobe that lies on top of the orbit of the eyes. This area plays an important role in behaviour. Driesen (2004:4) explains the role it plays in behaviour in that the orbitofrontal cortex receives direct inputs and provides the various brain areas with information about what is happening in the environment and what plans are activated by the rest of the frontal lobes such as physiological responses. Furthermore, Hendry and Niebur (2004:1) are of the opinion that the orbitofrontal

cortex plays an important role in the processing of rewards and punishment, which is a requirement for the multifarious and flexible social behavior.

Therefore, the teacher and psychologist can modify a middle adolescent's behaviour by reinforcing positive behaviour through praise and acknowledgement. In the Resilience Enhancement Kit the reinforcement of positive behaviour can be facilitated through tokens, verbal praise and group praise from the various group members. Resilient middle adolescents are capable of using intrinsic rewards to motivate themselves. Keeping this in mind a question that can be posed in the Resiliency Scale could be "I take time to celebrate my successes" and "I do not let criticism and negative comments from family, friends and teachers bother me".

The research into how the brain functions appears to have an influence on how teachers and psychologists perceive the behaviour of middle adolescents and also how they can assist them in developing appropriate social competencies. Talukder (2000:2) summarizes the discussed role of brain functioning in social competence when he states that the middle adolescent brain is a work in progress but parents, educators and psychologists can assist the progress of brain development necessary for social competence through open communication, instruction and clear boundaries. In an effort to fully comprehend the middle adolescent's social competency various theories emerged to illuminate the construct.

#### **3.4. Theory of social competence**

Odom, McConnell and McEnvoy (1992:5) refer to James Baldwin, who some believe was a precursor to Piaget, as one of the foremost researchers to discuss the importance of social interactions for the development of adolescents. Research into the development of children's social functioning, interaction and the development thereof started in the 1920's. Odom, McConnell and McEnvoy

(1992:5) also refer to the following research and contributions for social functioning:

- ❖ Thorndike in 1920 proposed that social intelligence was one of the forms of intellect. Currently Gardner labeled social intelligence in terms of intra- and interpersonal intelligence. Sternberg in 1985 embedded social competence in his triarchic theory of intelligence.
- ❖ Piaget in 1926 emphasized the importance of engaging in social interactions with peers for the development of cognitive abilities.
- ❖ Parten, Moreno and Mead in the 1930's made contributions in terms of implementing assessment and intervention systems for social behaviour.
- ❖ Tredgold in 1937 and Doll in 1941 proposed that the measurements of social competence or adaptive behaviour be incorporated into the criteria employed for diagnosing mental states. Doll continued to develop the Vineland Social Maturity Scale that provided a standardized assessment for measuring social abilities and competence.

Merrell and Gimpel (1998:8) indicated that the Second World War and Cold War interrupted research into the areas of social functioning in children and adolescents and it was during the 1970's that the disciplines of Education and Psychology brought it to the forefront. The theorists concerned with the development of children and adolescents incorporated their views of social functioning in their theories which included the role that social cognition play in social competence.

Merrell and Gimpel (1998:31) also refer to Harris who is of opinion that the five aspects of social cognition that are essential contributors to social competence are peer interaction, perspective taking or role taking, interpersonal problem-solving strategies, moral judgement and communication skills. *"Across developmental periods, pro-social skills (friendly, cooperative, helpful behaviours) and self-control skills (anger management, negotiation skills, and problem-solving skills) are key facets of social competence. Social cognitive development is the process whereby changes in cognitive functioning allow the developing*

*child to engage in a hierarchy of increasingly complex and potentially meaningful social interactions with other persons and develop the necessary skills." (Merrell et al., 1998:30).* The middle adolescent phase is characterised by the influences of the peer group that shape their behaviour where they learn the social skills and attitudes necessary for social competence.

Middle adolescents establish greater independence from their parents by spending more time with their peers and through identification with peers, adolescents begin to develop group norms and values and define their own identity. The role of the peer group according to Gouws and Kruger (1994:120) include the following:

- ❖ The group identity influences the development of an individual identity;
- ❖ providing social acceptance and support ;
- ❖ creating an environment where they can experiment with different behaviours and ideas;
- ❖ giving the opportunity for healthy competition;
- ❖ expressing thoughts and feelings when spending leisure time;
- ❖ developing relationships and roles with the same and opposite genders.

Being accepted by peers has important implications for resilient adjustment during middle adolescence. Those who are accepted by their peers and have mutual friendships have better self-images and are able to use their friends as resources when faced with a problem and as a support system. Preoccupation with how their peers see them can become all consuming to middle adolescents. The intense desire to belong or to be "cool" can also influence middle adolescents to participate in activities they would otherwise not engage in that could include misbehaving in the classroom or being rude to others. It is the role of the teacher and psychologist to create guided opportunities where the peer group's positive influence can be harnessed to foster social competence. Gouws and Kruger (1994:71) reiterate the importance of creating guided opportunities for middle adolescents when he states the following: "*educators should provide*

*abundant opportunities for adolescents to engage in social interaction since they are helped by this means to rid themselves of their egocentrism and to learn that people with different opinions from their own may be right while they may be wrong".* Classroom discussions about how to initiate conversations with peers, give genuine compliments, be a good listener, share private information appropriately, and keep confidences are all part of forming and maintaining positive relationships as well as working effectively in a group, which can enhance social competencies.

The Resilience Enhancement Kit could utilize activities such as group work and role-playing to enhance social competencies. Group work and role-playing give the middle adolescent an insight into their own behaviour where consequences of actions can be discussed. These activities also allow the middle adolescent to practice the new competencies to identify effective and ineffective behaviour and communication styles, and in so doing enhance their level of confidence to apply the social competencies in a real life setting. Killen (2000:75) suggests the following advantages of group work that also includes role-playing as a group activity:

- ❖ *"Group work helps learners to respect each other strengths and weaknesses and to co-operate with one another;*
- ❖ *group work allows teachers to vary the learning tasks and adapt strategies for learners who have particular needs, interests and abilities;*
- ❖ *it encourages learners to verbalise their ideas and feelings and help them understand the subject matter and also allow learners to be effective at explaining ideas to others in a language they find easy to understand;*
- ❖ *group work gives an opportunity to contribute ideas and attempt to master the content in a non-threatening environment;*
- ❖ *the learners are actively engaged in learning and this can enhance their understanding and retention of the content taught;*

- ❖ *group work can increase the possibility that learners will look at problems from several perspectives because they are exposed to other people's ideas;*
- ❖ *group work allows learners to experiences roles as leaders, peers and subordinates and to experience a range of social contacts*
- ❖ *group work can be fun and therefore motivate learners as well as activating their prior knowledge in reconstructing their understanding of the content."*

It must be kept in mind that the teacher and psychologist should monitor the learner's interaction and co-operation during group work or role play activities to ensure that the activity is effective in its aim to foster social competence. The Resiliency Scale should also include questions related to relationships, specifically working in groups and might be stated as follows: "I work well within a group at school, even with someone who has different opinions to mine" and "I watch and learn from how others cope with similar problems to my own". In summary the role of the peer group play a significant part in learning social competencies during the middle adolescent years.

As part of the middle adolescent's social cognitive development Merrel and Gimple (1998:30) also referred to Bandura who suggested in 1986 that the nature of social cognitive development could be explained in terms of five human capabilities that effects a middle adolescent's behavioural functioning. They include (Merrel et al., 1998:30) the middle adolescents':

- ❖ ***"Symbolizing capability which involves the use of various symbols, including language as a means of altering and adapting to different environments."*** In the Resilience Enhancement Kit this aspect of the middle adolescents' social cognition might be utilized by asking them to use symbols as found in pictures and drawings as well as language that are characteristic of they way middle adolescents speak to create an advertisement which reflect their understanding of relationships that can help them rebound for example friendship.

- ❖ "**Forethought capability** that projects anticipation of likely consequences of behaviour and is demonstrated by intentional and purposeful actions that are future orientated." This aspect relates to the emotional and cognitive competencies as well, for example ego-resiliency and having a future goals and plans. The resilient middle adolescent has an understanding of how his or her behaviour affects others and themselves (self-perception and identity) and therefore he or she will think before acting. In the Resilience Enhancement Kit this forethought capability might be utilized to include activities such as interviewing classmates to identify how they can be a support system in terms of being a positive influence on their behaviour and how that person might help them achieve their goals. The Resiliency Scale could also include questions related to this forethought capability such as "my life has meaning and purpose".
- ❖ "**Vicarious capability** allows that not all learning must result from direct experience but can occur through the observation of other person's behaviours and the consequences that follow them." The Resilience Enhancement Kit can include discussions and demonstrations by the teacher or psychologist to model the correct social behaviour and also give the middle adolescents the opportunity in pairs to practice learnt appropriate social behaviour. Activities such as identifying a role model from society that exhibits resilient behaviour and studying their example can also allow the middle adolescent to model appropriate behaviour. The Resiliency Scale could also include questions such as "I watch and learn from how others cope with similar problems to my own" to measure the middle adolescent's ability to learn resilient behaviour through observation.
- ❖ "**Self-regulatory capability** that affects the development of the person's own internal standards and self-evaluative reactions to their behaviour. Thus discrepancies between internal standards and actual behaviours serve to govern future behaviour." The middle adolescents who have strong sense of internal standards and who are able to utilize self-

evaluative processes to adjust their behaviour reflect a resilient sense of self which includes a positive self-identity and self-efficacy. The Resilience Enhancement Kit can include activities that foster the middle adolescents' sense of self that allow them to know themselves better by means of identifying and describing personal characteristics (values and beliefs) and the steps towards being assertive. The Resiliency Scale might include questions such as "I have self-discipline and I am capable of handling difficult tasks or situations on my own"; "I stand up for myself without putting others down" and "I have enough confidence in myself to stand by my beliefs".

- ❖ **"Self-reflective capability** *which involves self-consciousness or the uniquely human ability to think about and evaluate personal thought processes.*" This self-reflective capability is also closely related to cognitive competence (metacognition). This self-reflective capability can be included in the Resilience Enhancement Kit by asking the learners to write down (journal) how they react, think and talk whilst busy with a group project. This will give the middle adolescents insight into how they typically think and react when confronted with a challenge. Gaining insight through note keeping can allow the teacher or psychologist to talk about how thoughts affect behaviour and how it can be changed to allow the middle adolescent to become more resilient. The Resiliency Scale might state a question regarding the self-reflective capability as follows: "When I decide to change my thoughts and behaviour, I am successful".

The above-mentioned theories regarding social cognition are related to general social functioning that reflects the middle adolescent's social competence. There are however, various theories that aim to explain social competence as a holistic construct. The frameworks for social competence have been developed to measure and explain the processes necessary for adaptive and constructive social behaviours and skills necessary for children and adolescents to be well adjusted and successful (resilient). Bortoli and Brown (2002:4) underline the



importance that the theoretical frameworks for social competence have for teachers and psychologist because it empowers them to understand how middle adolescents acquire skills, process social information and how interaction difficulties can be overcome. There are three significant theories related to the understanding of social competence. Bortoli and Brown (2002:4) refer to the social information-processing framework developed by Dodge and the social problem-solving framework developed by Rose-Krasnor and Rubin, which were expanded by Ladd and Crick. The social co-construction theory of Valsiner is the third theory on the development of social competency.

#### **3.4.1. Social information processing framework**

Bortoli and Brown (2002:4) quotes Guralnick as saying: "*the social information processing framework views social competence within social goals and social tasks that are present in the social environment that enables researchers to see how children integrate skills in their developmental domains. A social task is a higher order process that involves the integration, organisation and sequencing of social behaviours that influence how children become socially engaged and determine their social attention state*". This theory of Dodge suggests that middle adolescents would gain as much information as possible from the social situation in order to set specific goals. The goals are related to the developmental task inherent to that age group for example the middle adolescents are concerned with presenting an acceptable image to their peer group to gain peer acceptance and gain entry into this group and therefore their behaviour will be guided by this goal. The middle adolescent will observe how the other peers are behaving and imitate the behaviour, which could include the way they dress, talk and act. The Resilience Enhancement Kit could focus on the positive behaviour exhibited by the peer group and utilize group work (positive peer pressure) to modify the middle adolescents' behaviour with the guidance of the teacher and psychologist.

### 3.4.2. Social problem solving framework

The theory of Rose-Krasnor (Bortoli & Brown, 2002:4) implies that middle adolescents would set specific goals for themselves in terms of what they want to achieve in a particular situation. The behaviour the middle adolescent would exhibit will therefore depend on the cognitive strategies to solve the presenting problem or achievement of the goal. Alterations to behaviour would only be made depending on the result obtained in terms of the expected goal and resolution of the problem. Ladd and Crick expanded on the theory of Rose-Krasnor and Rubin. Ladd and Crick (Bortoli et al., 2002:5) proposed that *"in a social situation children will pursue goals which are driven by self-perceptions and emotions. A social exchange precedes behavioural enactment. The goals the child wants to achieve in the social exchange are viewed as the precursors to the behavioural enactment and determine the particular behavioural strategy to be selected by the child. The child's attributions and feelings will determine the outcome of their social exchange."* This implies that the middle adolescents' emotions will have an effect on the behaviour displayed during the social exchange for example sulking or whining to get what they want.

As discussed previously in the biological origin of social functioning middle adolescents' behaviour is driven by the emotional area in the brain which is characterized by fluctuating moods. Middle adolescents tend to be idealistic and often offer "simplistic" solutions to complex problems. They often assume that significant others think about the world as they do and concerned about the things they are (for example their appearance) and therefore must regard their problems in the same light which can cause conflict with their parents or teachers. Middle adolescents will also utilize argumentation and reasoning to persuade adults to agree with the solution to their perceived problems.

It is therefore important that in the Resilience Enhancement Kit the middle adolescent should be taught how to work together as a team to analyze a problem realistically and use the combined efforts of the entire group's strengths

and assets to solve problems appropriately which can help the middle adolescent in the future to rebound against adversities by utilizing significant others as resources.

#### **3.4.3. Social co-construction theory**

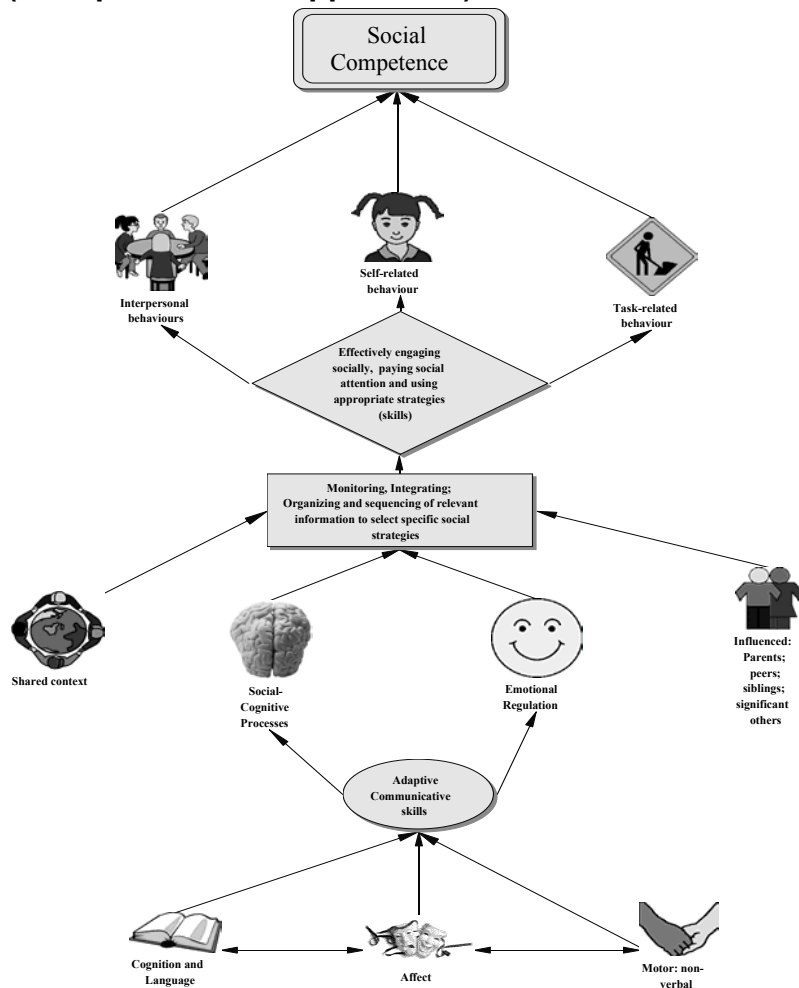
Bortoli and Brown (2002:11) give Valsiner's view on social competence as follows "*the middle adolescent's actions have no meaning in isolation and that their actions only acquire meaning when negotiations and interpretations between partners (parents, teachers and peers) are present. Effective social interaction is a result of knowledge and understanding of social scripts. Social competence emerges mainly from experience in close relationships and these social experiences are likely to serve as the foundation for the development of social adjustment*". This theory implies that the middle adolescent's social behaviour is influenced and facilitated by learned social scripts from significant others. The social scripts differ from the expectations of parents and teachers to that of the peer group. Middle adolescents appear to exhibit an indifference to adults, especially teachers and parents. Middle adolescents seem to be embarrassed by their parent's behaviour and are critical of parents and teacher's ideas of acceptable behaviour resulting in complaints such as "adults are cramping their style". Changes to behaviour are often brought about when the exhibited behaviour of the middle adolescent is in contrast with the norms, values and expectations (social scripts) of expected social behaviour.

The Resilience Enhancement Kit utilizes the facilitator (teacher or psychologist) to model appropriate behaviour for middle adolescents and together with the learners set goals that will guide them to identify, manage and apply the social competencies in every day life. Group discussions and examples given by middle adolescents related to the social competencies acquired in the Resilience Enhancement Kit could aid with the meaning attribution and relevance of the content to their life world.

Any discussion of theories should include a critical reconsideration of their limitations. The theories discussed previously are primarily focused on the cognitive processes involved with social interaction. Each theory focuses on a single aspect for example social problem-solving, social goals and tasks or the influence of social scripts without integrating all the relevant aspects into a holistic framework that includes the emotional aspects. An amalgamation of the social competence models of Reschly and Gresham as found in Merrell & Gimpel (1998:14) and Guralnick as found in Odom; McConnell and McEnvoy (1992:41) summarizes the above mentioned theories and takes into account the emotional functioning of middle adolescents.

The models of Reschly and Gresham as found in Merrell & Gimpel (1998:14) and Guralnick as found in Odom; McConnell and McEnvoy (1992:41) can be illustrated as follows:

**Diagram 6: (With permission: Appendix B)**



The models of Reschly and Gresham as well as Guralnick are hierarchical in that higher levels depend upon lower ones. Social competence is dependant upon the cognitive / language, emotional (affect) and motor (non-verbal) abilities or domains situated within the middle adolescent. Social interaction relies on these mentioned aspects which are interdependent in order to communicate effectively and to complete social tasks. The social situation requires the middle adolescent to utilize cognitive and emotional processes while monitoring, integrating, organizing and sequencing information necessary for social interaction, obtaining goals, and completing tasks or problem-solving. The shared cultural / situational context and influence (social scripts) from parents, siblings, peers, teachers and significant others influence the above mentioned process. The process requires the middle adolescents to effectively engage on a social level, pay social attention to the actions and reactions of others and themselves as well as choosing the correct skills that will be appropriate in the situation. Appropriate behaviour and successful negotiating of the situation related to interpersonal, self-related and task-related behaviours lead to being socially competent.

### **3.5. Development of social competence**

Social competence needs to be transferable into all the contexts of a middle adolescent's life. Social competence is necessary for effective interaction with other people, adjustment to new situations and relationships and for the management of potential risk or stressful happenings in an effective manner. Scott (2003:1) accentuates the importance of developing social competence as follows: "*emerging theories of youth development such as resiliency, self-efficacy and protective factors have stressed social competence as an important dimension of successful adolescent development. An understanding of the development, maintenance and enhancement of social competence is useful in determining how to help protect adolescents from negative influences and assist them in reaching their optimal potential*". Social development and the formation of optimal social competency begins at birth and progresses with interaction between parents, peers, teachers, psychologists and significant others.

Schwartz (1999:4) states that the most significant factor in promoting middle adolescents' social development may be the soldering with positive, nurturing adults that includes teachers who offer unconditional acceptance and support, model appropriate social behaviour, live according to positive values and convey the importance of these values to wellbeing. It is therefore important that the middle adolescents learn how to form and maintain positive relationships because it allows them to feel accepted, connected and supported especially when they are faced with adversities and stressors. Effective verbal and non-verbal communication is necessary in relationships because it allows the middle adolescents to express their needs and ask for assistance and utilize friends, family, teachers and Educational psychologists as assets to help them rebound. Therefore the Resilience Enhancement Kit should focus on enhancing and developing positive relationships in middle adolescents.

An aspect that is commonly found in relationships includes sharing a sense humour. Middle adolescents are characterized by finding the comical in any situation which will result in fits of laughter or for example girls giggling about something someone said or did even if it might not seem funny to an adult. McGhee (2004:2) propose that a sense of humour is one of the most powerful ammunition for boosting resilience because the muscle relaxation brought about by laughter eases psychological tension, it creates a sense of control over the source of stress and helps keep problems in perspective. He also states that humour and laughter boosts energy levels and helps combat burnout as well as displacing negative emotions for positive emotions. In the Resilience Enhancement Kit the teacher or psychologist could use humour to acquire and sustain the middle adolescents' attention and to utilize their humour to strengthen the neural pathways by associating the learnt social competencies with a positive and pleasant experience. Laughter and humour is also a naturally occurring phenomenon and therefore activities such as game playing and role playing will foster this important aspect of positive relationships. The Resiliency Scale can

also include a question such as "I can keep my sense of humour when things get tough".

Another activity that can foster positive relationships include the use of social stories in the Resilience Enhancement Kit to introduce a new social skill and establish the underlying principle for the necessity of such a skill and illuminate how the skill can be applied. Positive and guiding feedback from teachers and psychologists regarding the middle adolescent social functioning can serve as a touchstone for improvement. Social competence requires social awareness and self-consciousness with regard to pro-social skills and self-control skills that with practice could lead to advanced social reasoning and functioning. "*Social competence includes three interrelated content categories namely performance skills (what skills to utilize), societal norms (the when and where of skill utilization) and value judgments (the why of skill utilization) that enable the middle adolescent to act independently within social settings. It has been found that the most effective social competence programs are multi-dimensional and multi-level such as the combination of skills-based approaches with environmentally-orientated approaches.*" (Reiter & Bryen, 1991:99). Social competence is therefore enhanced and developed if there is a proficient fit between the middle adolescent's learned skills, strategies and processes with the social environment (relationships) in which it is used.

As middle adolescents become more mature in their phase of development they are capable of advanced cognitive and emotional reasoning regarding their social world. Their developmental operations equip them to utilize formal logic to solve social problems (Piaget formal operation theory), making decisions about the right or wrong action based on abstract internalized values and norms (Kohlberg's moral reasoning theory) and building complex relationships with the same and opposite gender that require a sense of self and autonomy (Erikson's theory of life tasks). Bellafiore (2003:2) summarizes the changes that the middle adolescent experience as follows: "*the normal life cycle contains predictable*

*periods of life disruption. For example, when we move from childhood to adolescence, everything we had previously known about the world goes through a jarring transformation. During this period of life disorganization, our bodies go through tremendous hormonal and developmental changes, our definitions of other people change, our motives and interests change, we learn how to define ourselves as individuals with autonomy and we expand our range of social relationships."* Therefore, if the middle adolescent is able to think realistically about themselves (self-perception and self-identity) and are able to work effectively with the significant people in their lives (autonomy and self-efficacy) they are empowered to utilize their inherent strengths and assets to rebound against the onslaughts of life. Middle adolescents create their sense of self (identity and self-perception) through interacting with others. The interdependent relationship between middle adolescents and significant adults and peers allow for positive influences to enhance their social competence.

According to Welsh and Bierman (1998:6) social competence can be developed by modelling, reinforcing, rehearsing and feedback of the desired behaviour or skills gained from social interaction with others. Modelling refers to the middle adolescent observing then imitating a particular social skill after explanation and discussion of that skill and could be incorporated in activities such as discussions and peer interviewing. Reinforcing successful attempts of strategies or skills by using the same one in different situations automates the behaviour. Rehearsal or role playing strategies give the middle-adolescent the opportunity to practice new skills in a supportive environment as it is reflected in the Resilience Enhancement Kit. The development of social competence begins in the home and is influenced by parents and siblings.

*"Research into social competence has been conducted from a social mould perspective in which various parental styles, behaviours and characteristics (e.g. modelling) are conceptualized as antecedents of social and psychological outcomes in adolescents. Socialization is viewed as a unidirectional process with*

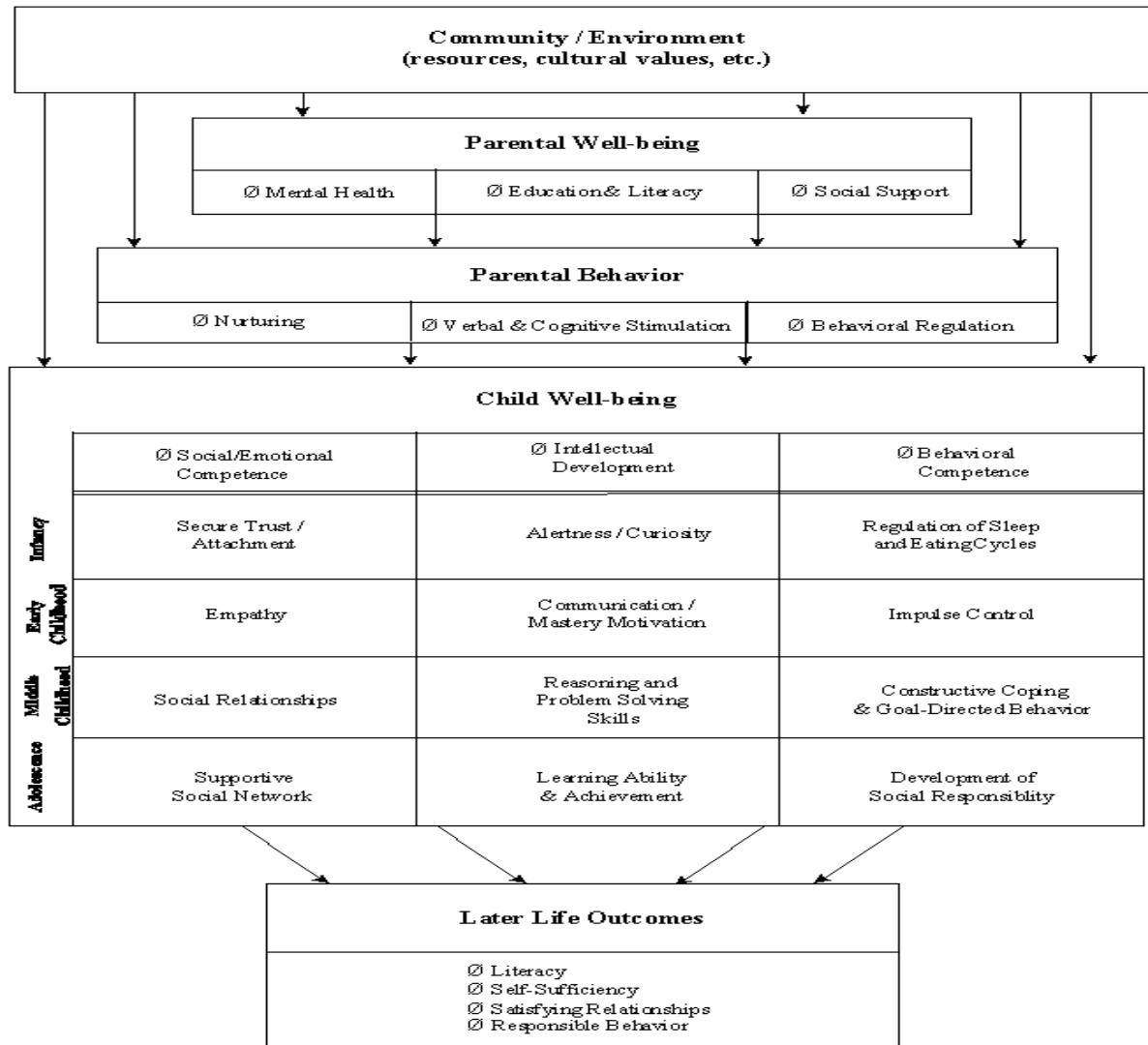


*social agents (parents) functioning to influence or shape adolescents" (Peterson & Leigh, 1990:107).* This implies that the family has an important role to fulfil in the development of social competence in middle adolescents. However, the composition of the family structure has changed dramatically in the last century from an extended family to a nuclear family where the parents both work to subsidize their lifestyle and the occurrence of single parent families. As a result the time spent to influence the middle adolescent's development of social competence has dwindled due to the demands of a changed society. The mass media has become a more prominent force in the middle adolescent's life that could enforce different values, norms and morality to that of the family in terms of acceptable behaviour and social conduct.

The influence of the family on middle adolescents include adapting to life through the modelling of social rules, roles, accepted behaviour within a cultural context, ways of conflict resolution and discipline that develop morality, altruism and responsibility. Parental styles foster development in terms of interpersonal skills, effective communication, self-awareness and the formation of a personal identity. *"Since the 1940's numerous studies and reviews have identified two generic dimensions of parental behaviour-support and control as principal aspects of child rearing that predict youthful social competence. Support refers to warmth, affection, nurturance and acceptance of parents while control refers to the actions used by parents while attempting to modify the behaviour and internal states of adolescents by encouraging social responsibility, self-control, independence and self-esteem. A moderate level of cohesion (separateness and connectedness within the family) seems to provide the most conducive environment for the development of adolescent social competence" (Peterson et al., 1990:110).* Thorne and Rintoul (1999:47) supported this view and proposed that the behaviour of the parents shape the middle adolescents wellbeing and that nurturing, stimulation and regulation (includes discipline) leads to social competence.

The following illustration by Thorne and Rintoul (1999:47) summarizes the discussed views and depict the effect that parenting have on the developing child and adolescent in particular social competence through modelling and reinforcement.

**Diagram 7: (With permission: Appendix B)**



Siblings also have an effect on the middle adolescents' social competence development in the home. Schneider (1993:39) reiterates the importance of siblings as peers at home and feels that older siblings may provide information and guidance to their younger brother and sister about peer culture necessary for social interaction. Middle adolescents are focused on developing a sense of

themselves and shaping their identities and behaviour in terms of the expectations and norms of significant others like siblings. Middle adolescents undertake diverse social roles as they interact with peers and siblings, while they in turn serve as a social springboard for adolescents to distance themselves from their emotional dependence upon their parents towards independent functioning with an understanding of the social rules and conventions inherent to their culture. The time spent in the school context allows the middle adolescent to practice, explore and exhibit the social roles, behaviour in an environment that could be described as a condensed global society.

The teachers and psychologists working in a school environment continue the lessons taught in a good home. For most of the middle adolescents, school is a prominent part of their life. It is where they relate to and develop relationships with their peers and significant adults while having the opportunity to develop the competencies necessary for survival in a constantly changing society. The school context might even be a source of safety and stability for middle adolescents who do not have a supportive home environment. The characteristics that can be present in a supportive home can also be present in a school that aims to foster resilience such as a sense of attachment, bonding, belonging and being cared about. Positive relationships and modelling of appropriate behaviour by teachers and psychologists can assist the middle adolescent in forming social competencies that will help them rebound.

However, the middle adolescent might not necessarily appreciate or accept the influence that the school can have on their lives. *"Unlike young children, adolescents no longer accept without question whatever their teachers tell them. Adolescents tend to condemn their seniors with just as much passion as they idealize them. They can be extremely critical and mistrustful about the actions of teachers and can undermine their authority most effectively. During this phase the teacher should rather assume the role of escort and companion"* (Gouws et al., 1994:117). Although the teacher and psychologist can be a support system

for middle adolescents, the way that the middle adolescent is approached and is taught the competencies necessary for resilience will ensure the success thereof. Social competencies should relate to the middle adolescents' level of interest and should actively involve them and give them the opportunity to participate and share their views. The Resilience Enhancement Kit could include these aspects and by so doing avoid being prescriptive which can create feelings of resentment and uncooperativeness.

The activities that are developed in the Resilience Enhancement Kit should encourage the middle adolescent to engage in it by structuring the activities to include their interests and such activities could include game playing. Welsh and Bierman (1998:4) support this view and state that at school middle adolescents begin to develop an interest in structured board games and group games with complex sets of rules. They suggest that being able to understand and follow game rules and being able to handle competition in appropriate ways become important skills for social competence. The non-threatening nature of games as well as the group structure thereof which can lead to incidental learning that can be beneficial in developing social competencies and should be included in the Resilience Enhancement Kit. An understanding of the origin and development of social competence provides a framework where the elements of social competence can be assessed and constructed.

### **3.6. Psychological appraisal of social competence**

A variety of definitions regarding social competence resulted in an assortment of measurement procedures. Odom and McConnell (1999:1) classified the approaches into three categories "*all inclusive approaches that include all competent performance (social performance, language performance, adaptive responding); behavioural approaches that include only discrete social behaviours (social initiations, social responses) and cognitive approaches that include social and cognitive skills (social initiations and responses as well as social problem-solving skills)*". The external manifestation of social competence is the behaviour

the middle adolescent exhibits. As a result the behaviour can be directly observed and an event recording of the incidents for example interaction with peers can be made by teachers, psychologists, parents, peers or significant others. The information gained from the observations and recordings can prove invaluable in aiding and guiding the middle adolescent to become more self aware of his or her behaviour in different situations and in diverse contexts. The information can form the grounding for the development of social competence through modelling, reinforcement and feedback. If the observers for example teachers and psychologists know what appropriate behaviour to be attentive to and are skilled in recording the observations accurately, the information can be utilized to build a reserve of strengths and assets for reinforcement in the middle adolescents. The same holds true for the identification of areas in need of development.

Another semi-structured method of assessing social competence is interviews. Interviews create the opportunity to obtain information from the middle adolescent or peer's experiences and self knowledge regarding their social competence. The following rating scales according to Merrell (2003:323); Merrell and Gimpel (1998:63) and Nabuzoka (2000:87) are available to measure social competence:

- ❖ Walker-McConnel Scale (SSCSA) of social competence and school adjustment is a social skills rating scale for teachers and school-based professionals. It is aimed at learners from grades 7-12. This rating scale is an indication of adaptive social-behavioural competencies within the school environment.
- ❖ The behavioural assessment system for children (BASC) developed by Reynolds and Kamphaus is a multi-method behaviour rating system for use with children and adolescents. It includes rating scales for teachers, parents and a self-report scale. Although the content is oriented toward problem behaviour there are also items towards adaptive social behaviour.

- ❖ The school social behaviour scales (SSBS) was developed by Merrell and Austin for use by teachers to assess both social competence and antisocial problem behaviours of children and adolescents.
- ❖ The Matson evaluation of social skills with youngsters (MESSY). Developed by Matson, Esveldt-Dawson and Kazdin is a teacher rating scale analyzing inappropriate and adaptive behaviours. The rating form is for middle adolescents from 4-18 years.
- ❖ The Social skills rating system (SSRS) developed by Gresham and Elliott focus on behaviours that affect parent-child relationships, teacher-student relationships and peer acceptance. The instrument is divided into three developmental groups' namely preschool, elementary level and secondary level.
- ❖ Assessment of interpersonal relations (AIR) is an instrument designed by Bracken to assess the quality of interpersonal relationships from the middle adolescent's (ages 9-19 years) perspective. It assesses the perceived quality and adjustment of relationships with parents, peers and teachers respectively.
- ❖ The general competence index (GCI) developed by Greenspan, Gregory, Granfield and Musheno. The index taps into a middle adolescent's social competence that includes temperament, sensory functioning and language and cognition.
- ❖ Odom and McConnell (1999:1) proposed a performance based assessment of social competence that involved significant social agents in children's environments to make judgements about the competence of the children's social behaviour. The multi-method assessment included direct observation, observer impressions, teacher ratings and peer ratings.

Although the above-mentioned rating scales include a wide variety of aspects that can be measured, a critical view should also include the limitations of their use. Odom and McConnell (1999:2) warned against the limitations of using one or the other of the above mentioned assessment measures: "*the existing*

*approaches are generally unidimensional in nature and may under represent the actual interpersonal social functioning of children, in particular these approaches all focus on the actions, characteristics or skills of a particular child with little attention to the social validity and or impact of these features."* Most of the assessment instruments were developed and standardized in America. One of the limitations would be that the assessment instruments might not always be applicable to the South-African context with its diverse cultures, languages and varying socio-economic citizenry. A further concern is that many of the rating scales are only based on a medical model of deficits rather than also including the assets or strengths the middle adolescent might encompass or exert.

Although the areas of development can never be disregarded, there must be a paradigm shift towards a more positive psychology that views the middle adolescent holistically and utilizes strengths, abilities and assets to enhance social competence. Odom and McConnell (1999:2) quotes Hops and McFall who proposes that: "*social competence is not reflected solely by the social behaviours of middle adolescents nor by the social-cognitive processes that underlie these behaviours; the behaviours and processes are necessary but not sufficient for a complete description of social competence. It could rather be best measured by considering the social impact of an individual's behaviour in particular settings; this social impact is perhaps most directly assessed by considering the judgements of significant social agents about individual children's behaviour in social interchanges in these settings for example in the school setting*". Therefore, the Resiliency Scale that will be developed should take into account and amalgamate the competencies necessary for resilience and focus on the positive aspects of the middle adolescent's social functioning. The information gained from this self-report questionnaire (Resiliency Scale) could be used to guide teachers and psychologists to enhance and develop social resilience in the school context.

### **3.7. Social resilience and school context**

Schools are complex environments comprising of heterogeneous populations from various cultural contexts. It has become increasingly important for teachers not only to facilitate the academic content of subjects but also to equip the middle adolescent with the necessary skills to excel in life and rebound from experienced barriers to development and learning. The South African education philosophy (Outcomes Based Education) is focused on developing children and adolescents holistically and equipping them with skills to be well-integrated contributing citizens of the country. Vincent, Horner and Sugai (2002:1) supports this view and state that *"over the last two decades, schools face the challenge of creating environments that are sensitive to a myriad of individual's backgrounds and support all learners' social and academic success. They are responsible for establishing and maintaining socio-cultural microcosms that teach children to negotiate the diverse values and social norms of a pluralistic society."* Social competence assists middle adolescents to develop into independent, capable and competent individuals.

The development and enhancement of social competencies as a resilience modality will equip middle adolescents to deal with the choices and challenges they face; in forming and maintaining healthy relationships; reducing and coping with stress and contributing effectively to their own learning by being responsible for their behaviour as well as creating a sense of self. The school has an important challenge in fostering the development of middle adolescents to be socially capable in dealing with the stresses of a rapidly changing competitive world. Merrell and Gimpel (1998:12) refer to Stephen's social skills framework that adolescents need to develop for effective social functioning and social competence in the school context :



**(With permission: Appendix B):**

| Self-management   | Environmental behaviour  |
|---|--|
| <ul style="list-style-type: none"> <li>✘ Self-control</li> <li>✘ Social conventions</li> <li>✘ Accurate perception of a situation leads to the correct interpretation of social cues and appropriate responses.</li> <li>✘ Independence</li> <li>✘ Accepting consequences</li> <li>✘ Ethical behaviour (e.g. tolerance)</li> <li>✘ Expressing feelings</li> <li>✘ Positive attitude towards self</li> <li>✘ Responsible behaviour</li> <li>✘ Self-care</li> </ul>         | <ul style="list-style-type: none"> <li>✘ Care for the environment</li> <li>✘ Dealing with emergencies (bullying or physical violence)</li> </ul>   |
| Task-related behaviour/ Academic  | Interpersonal behaviour / Peer relations   |
| <ul style="list-style-type: none"> <li>✘ Asking and answering questions</li> <li>✘ Attending behaviour</li> <li>✘ School adjustment</li> <li>✘ Respect for social rules at school</li> <li>✘ Classroom compliance</li> <li>✘ Completing tasks</li> <li>✘ Following directions</li> <li>✘ Active participation in group activities</li> <li>✘ Independent work</li> <li>✘ Good quality of work</li> <li>✘ On-task behaviour</li> <li>✘ Performing before others</li> </ul> | <ul style="list-style-type: none"> <li>✘ Accepting authority</li> <li>✘ Coping with conflict</li> <li>✘ Gaining attention appropriately</li> <li>✘ Helping others</li> <li>✘ Making conversation</li> <li>✘ Positive attitude towards others</li> <li>✘ Respecting property of others</li> <li>✘ Assertiveness</li> <li>✘ Selection of positive role models and supportive mentors</li> <li>✘ Social problem-solving, cooperative behaviour, understand group process</li> </ul> |

The framework presented includes aspects of both emotional- and social competence. The aspects related to emotional competence includes self-control and accepting consequences of behaviour (ego-resiliency), expressing feelings and helping others, ethical behaviour as well as having a positive attitude towards others (empathy). The social skills encompassed within social competence include perceiving a situation accurately that will enable the middle adolescent to interpret social cues and responses correctly (verbal and non-verbal communication). Aspects such as active participation in group activities, on-task behaviour, performing before others, coping with conflict, assertiveness and cooperative behaviour are all related to working effectively in groups which is associated with positive relationships. The middle adolescent's sense of self is reflected in social skills such as self-care, positive attitude towards the self and independence. The mastery of social competence will lead to the appropriate school-related behaviour such as attending behaviour, classroom compliance, completing of task and following of directions.

The Resilience Enhancement Kit should enhance and develop social competencies that include the ability to form, maintain and develop positive relationships, demonstrating self-efficacy inherent to a positive self-identity and self-perception. The ability to communicate effectively on a verbal and non-verbal level, displaying a sense of humour in the face of adversity and exhibiting an independent, proactive work ethic while working with members of a group are also important social competencies. As discussed earlier in the chapter, all these competencies are manifested in the behaviour of the middle adolescent and these competencies can be developed and enhanced through the Resilience Enhancement Kit.

The Resilience Enhancement Kit should empower the middle adolescent to identify, manage and utilize existing internal and external social assets to rebound in the face of adversity and the stressors they are exposed to even at school. *"From middle school on, students are expected to assume increased*

*responsibility for regulating their behavioral and academic performances. They are expected to manage the instructional styles and work demands of multiple teachers, spend increased time beyond the instructional day completing long-term assignments and use a range of interpersonal skills to negotiate social demands and respond to peer pressure" (Lane, Pierson & Givner, 2004:174).*

These challenges are compounded by the fact that middle adolescents in South Africa are also challenged with making a transition from primary school into high school which can place pressure on a learner who does not have the necessary repertoire of social competencies which can help them to rebound.

The teachers and psychologists can play an essential role in facilitating social competence by introducing activities as part of the curriculum that could encourage the development and enhancement of social skills and positive attitudes. These activities that rely on working in a group where social learning can be most effective might include classroom discussions, role-playing, game playing, social stories and pair work. Interactive group activities define roles, sets limits and expectations for behaviour. Reid (2001:6) quotes Serok and Blum who are of opinion that game playing is inherently social and involves learning and following rules, problem solving, self-discipline, emotional control and adoption of leader and follower roles, all of which are essential components of socialization. Reid (2001:9) adds that interaction and game playing facilitates identification with peers of the same gender and aids in the formation of autonomous personality functioning within the boundaries of prescribed social roles. The choice of activities that foster social learning in a non-threatening and enjoyable manner in the school context will encourage middle adolescents to integrate the social competencies and utilize it more readily. Bellafiore (2003:1) quotes Ralph Emerson as saying "*and thus, like the wounded oyster, he mends his shell with pearl*" which is an eloquent image to describe the role of the school in fostering social competencies necessary for resilient functioning in this turbulent stage of development. The enhancement and development of social competencies are coalesced in the Resilience Enhancement Kit which is discussed in chapter five.

### **3.8. Conclusion**

In this chapter the influence and importance of social competence was weaved into the tapestry of the resilience framework that can be applied to the middle adolescent. The nature and origin of social competence were discussed. The various theories that underpin social competence were highlighted as well as the assessment methods that allow teachers and psychologists to obtain insight into middle adolescents' social competence. It was found that social competence develops from an early age and is shaped by family, peers and especially the school. The school provides a secure environment with a heterogeneous population and mentors in the form of teachers and psychologists who can assist the middle adolescent in developing social competence. The social competencies that foster resilient functioning was found to be the forming and maintenance of positive relationships, that include communicating and participating effectively in a group. Creating a positive sense of self encompasses a middle adolescent's self-identify, perception and self-efficacy that are also part of social competence.

Through activities such as modelling, reinforcement, positive feedback, group work, games and role playing the middle adolescent can master his or her ability to manage and enhance social competence. Middle adolescents have to navigate their lives through the labyrinth of social experiences and relationships that can leave emotional scars and have a negative effect on school functioning if they are not provided the opportunity in schools to develop and enhance this critical social modality of resilience. The school can act as a catalyst for social resilience in middle adolescents. It became apparent in this chapter that emotional competence, social competence and cognitive competence are intertwined and function interdependently as resilience modalities. The next chapter will focus on the development of cognitive competencies in the middle adolescent.

## CHAPTER 4

### **The nature, characteristics, development and appraisal of cognitive competencies in middle adolescents within the school context.**

*"It is thinking style that determines resilience, more than genetics, more than intelligence, more than any other single factor"*  
(Kordich-Hall & Pearson, 2003:1).

#### **4.1. Introduction**

The research of the human mind, intelligence, aptitude and ability to learn and reason has been a topic of investigation for various disciplines over the years. A detailed discussion of the full body of prior knowledge related to these above-mentioned aspects is beyond the purview of this chapter. The focus of this chapter will therefore only be on the role cognitive competence plays regarding the middle adolescents' resilient functioning within the school context.

The demands of the twenty-first century require middle adolescents to analyze and integrate complex and varying forms of information (for example the content in the school curriculum) and to utilise them in novel ways to solve problems and make decisions that impact on their future. Schools can create a culture in which learners can establish resilience by fostering higher cognitive skills, which will enable them to think critically, creatively and reflectively about the world they live in and apply these principals to real-life adverse situations. Fry (1992:vii) state that it is the role of Educational psychologists and teachers to provide cognitive instruction that promote cognitive competence in all children by cultivating a disposition for higher order thinking skills and teaching thinking and problem solving skills. Introducing learners to cognitive competencies in schools that promote pliable and self-regulating flexible thinking can prepare them to deal with

inevitable adversities and inoculate them to manage stressors and changes in life. Resilience enables the middle adolescent to make tough decisions and to solve problems, which will allow them to defuse and manage the moments of chaos in their lives. *"Cognitive flexibility strengthens our ability to maintain resilience because it allows for the consideration of a number of different alternatives, one of which might solve the problem"* (Joseph, 1994:37). This implies that resilient middle adolescents are able to reframe their thinking, which allows them to see adverse situations from different perspectives that equip them to focus on how to overcome the barriers to wellbeing. Joseph (1994:28) stresses that resilient middle adolescents are able to interpret their experiences in positive and constructive ways even when those experiences are painful or negative. This chapter will explore cognitive competence as a modality of resilience with regard to the nature and theory underlying the concept, the development and appraisal thereof as well as the role it plays in school functioning.

#### **4.2. Defining terms related to cognitive competence**

Mwamwenda (1995:89) views cognition as a middle adolescents' mental capacity to engage in thinking, reasoning, interpretation, understanding, knowledge acquisition, remembering, organising information, analysis and solving of problems. The way in which middle adolescents think, reason and understand the world around them evolve from concrete thinking to more abstract thinking in this developmental phase. In the school context cognitive competencies enable the middle adolescent to interact and engage with the teachers, psychologists, peers and curriculum content in order to effectively learn, develop skills and mature to reach his or her full potential. *"During cognitive development, it is important to bear in mind that performance does not necessarily reflect competence. It is possible that a child may have the necessary cognitive structure (competence) and yet may not be in a position to translate it into a required observable behaviour (performance)"* (Mwamwenda, 1995:143). This

implies that although the middle adolescent might have some of the cognitive competencies acquired through learning they might not know how to actualize it to help them rebound against adversity and that is why it is important for the school to empower the middle adolescent to know how to develop and apply their cognitive competence.

At school and in the education discipline, cognitive competence is seen as a fundamental element that middle adolescents need to master. The generally accepted scholastic indicators of cognitive competence are the academic skills in the domains of language (reading, writing and comprehension) and mathematics (arithmetic). Although these skills are critically important, cognitive competence consists of more than just academic skills. *"Cognitive competence includes two overlapping but distinct sub-constructs. Cognitive competence is the ability to develop and apply the cognitive skills of self-talk, the reading and interpretation of social cues, using steps for problem solving and decision-making, understanding the perspective of others, understanding behavioural norms, a positive attitude towards life and self awareness. The second aspect of cognitive competence is related to the development of core capacities, which includes the ability to use logic, analytic thinking and abstract reasoning"* (Catlano et al., 1998:3)". This view suggests that cognitive competence is interrelated with emotional- and social competencies and they interact with each other to fortify a middle adolescent against the onslaughts and demands of life. Traditionally South African schools have not taught middle adolescents to think critically and creatively and have not included the emotional and social competencies in learning but relied on prescribed rote learning of content to gain mastery of subjects.

However, the current South African education system aims to enable middle adolescents to become more independent and contribute to their own learning. Fry (1992:10) stresses the importance of schools to foster cognitive competence in middle adolescents. She suggests that there needs to be an integration

between facilitating higher order cognitive skills such as knowledge acquisitions and problem solving as well as self-evaluations and meta-cognitive skills that will have an impact on middle adolescents' sense of personal competence, self-efficacy and personal self-worth. The higher order thinking skills (meta-cognition) enables the middle adolescent to evaluate alternatives to problematic situations and to reframe the way that they think about problems and to make appropriate decisions. Effective decision-making requires that the middle adolescents have to execute the applicable cognitive competencies that will help them deal with stressors of life. Fry (1992:xi) describe cognitive competence that needs to be fostered in schools as the middle adolescents' capabilities to obtain, analyze and apply composite information; to locate, communicate and generate information successfully; to solve problems swiftly and resourcefully; make informed decisions and be committed to self-regulated learning.

Most problems and decisions middle adolescents that have to be deal with especially in the school context requires consideration of different people's points of view as well as their own. The way that middle adolescents will manage adverse situations will depend upon how they think about what has happened, because their thoughts will govern their behaviour. Joseph (1994:192) agrees with this view and state that learning to identify pessimistic thought patterns and substituting them with realistic, constructive thoughts reduces negative emotions and improves school performance. The way the middle adolescent thinks about life, wants out of life (future perception) and personal goals they want to achieve will provide motivation and a sense of purpose to persevere when things get tough. To understand the cognitive competence as a modality of resilience the nature thereof must be taken into consideration.

#### **4.3. Nature and origin of cognitive competence**

Cognitive competence involves the capacity of the human brain to think, reason and regulate all forms of cognitive operations in learning and interacting with the environment. It is important for teachers and psychologists to know the biological



functioning in the brain in order to assist and understand the middle adolescents' needs and ways of learning and coping. Geake (2003:8) propose that differences in preferred learning styles support that the brain functioning is as unique as faces or even fingerprints. He contends that reinforced neural pathways created by learning tend to stay that way and therefore the curriculum should be structured for integration of knowledge, skills and understanding by providing for individual differences in learning needs. This implies that every middle adolescent's brain is unique and develops at its own pace. Middle adolescents have a collection of life experiences that differ from person to person and their brain development may affect their ability to utilize these areas in their brain that help manage negative life experiences. In stimulating and enriching environments where there is active mental engagement with learning materials the teacher and psychologist can strengthen the areas in the brain involved with resilient functioning.

Wilson and Horch (2005:4) are strong advocates for the continuation of teachers to gain knowledge of brain research and the implications thereof for classroom instruction. They concur with previous authors' views in chapters 2 and 3 that the middle adolescents' brain is still developing and that sensorimotor stimulation creates stronger synaptic connections therefore teachers should create a diverse stimulating and arousing classroom that will foster cognitive competence. The brain inputs information through the senses and seeks, creates and retains patterns of meaning as it stores new information. Due to the technological age in which the middle adolescents find themselves they tend to be visually orientated which can be seen in the many hours spent watching television, playing playstation games, computer games and working on the internet. The middle adolescents' attention is held with activities that draw upon their all their senses.

However, in the classroom situation, the teaching method is still predominantly auditory and as a result, the attention of the middle adolescent can be lost within a few minutes. Wilson and Horch (2005:2) concurs with this statement and refer

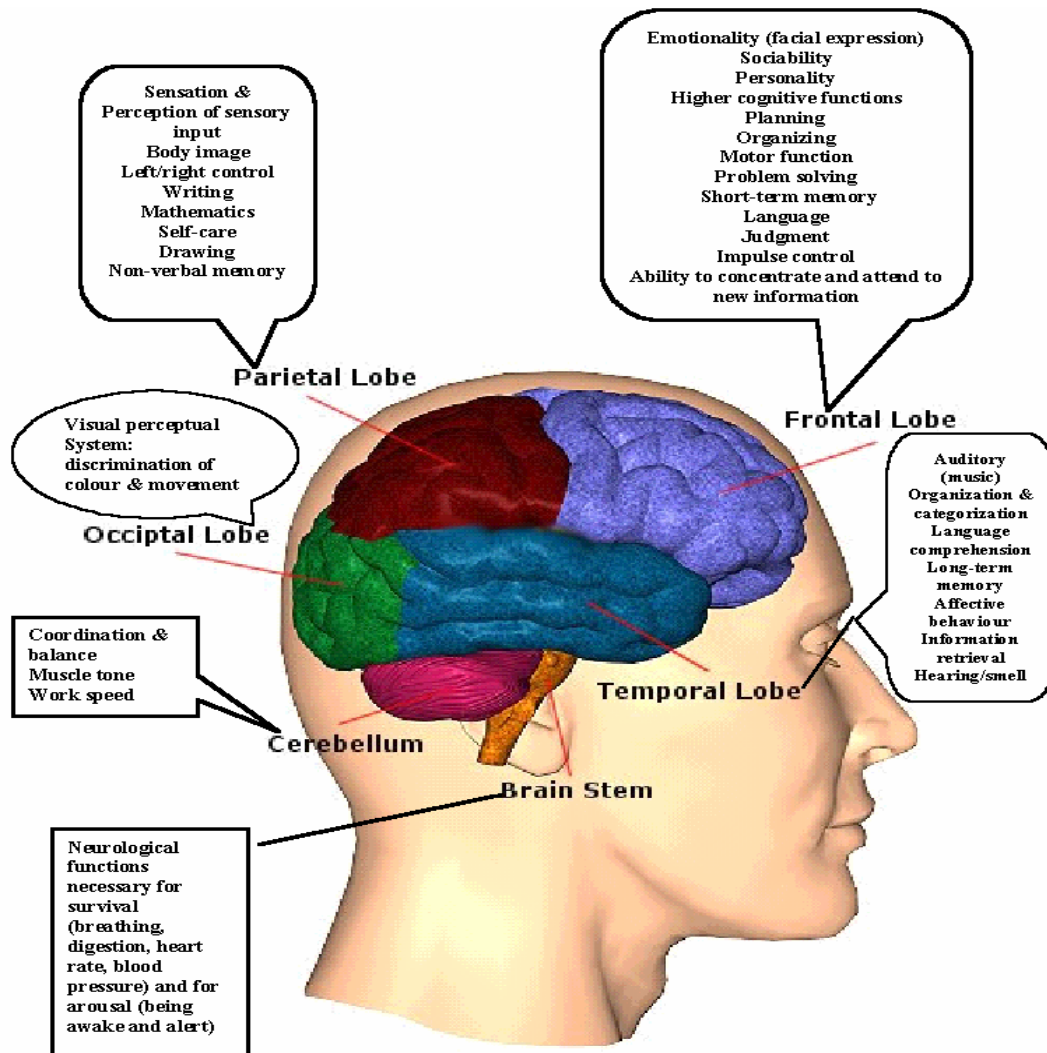
to neuropsychologists who promote the idea that attention can be retained through sensorimotor experiences such as music, smell, touch and emotion eliciting situations that focus middle adolescents on learning. Wilson and Horch also propose that teachers could use questions to frame units of study, incorporating the senses and emotions to focus learning for middle adolescents and then facilitating them in finding multiple ways to solve problems which can build complex neuron connections within the brain.

For these reasons the activities that can be developed for the Resilience Enhancement Kit should focus on incorporating all the senses in developing cognitive competence. These activities might include teaching the resiliency competencies through the use of visual mind maps with different shapes and colors, posters, music, building objects and solving puzzles. The brain requires time to build and enhance the network of connections between neurons that are necessary to process input and transfer information from short-term memory to permanent long-term memory and therefore the competencies learnt by the middle adolescent should be reinforced on a continuous basis in the classroom. The middle adolescent initiates learning of cognitive competencies by drawing upon his or her affection, cognition and prior conation. Each of these areas affects how the middle adolescents think, feel and respond to new situations as well as using prior knowledge and skills to effectively manage problem situations or make decisions that could affect their future. Although the brain in its entirety is involved with cognitive functioning the areas involved with higher order thinking skills include frontal cortex, pariental and temporal lobes, also called the Cerebral Cortex.

#### **4.3.1. Areas in the brain involved with cognitive competence**

A brief discussion and overview of the amalgamated functions of the brain according to Lehr (2001:1-5) and Johnson (2002:1-7) is presented in the following illustration after which the areas of the brain involved specifically with cognitive competence will be discussed:

Illustration 5: (With permission: Appendix B)



#### 4.3.1.1. Cerebral Cortex

The area of the brain involved with higher order thinking skills (meta-cognition) includes the frontal, parietal and temporal lobes, also called the Cerebral Cortex. The Cerebral Cortex is asymmetrical and consists of two hemispheres (gray matter). Both hemispheres are able involved in analyzing sensory data, performing memory functions, learning new information, forming thoughts and making decisions. Johnson (2002:2) and Lehr (2001:3) describe the left hemisphere as an area capable of sequential analysis of information which

includes the systematic, logical interpretation of information. The left hemisphere is involved in interpretation and production of symbolic information presented in language, mathematics, abstraction and reasoning. Johnson (2002:2) and Lehr (2001:3) describe the right hemisphere as having a holistic function which includes processing multi-sensory input simultaneously to provide a holistic picture of the environment by utilizing visual, auditory and spatial skills. Knowledge regarding the Cerebral Cortex enables the teacher and psychologist to create activities that will include both the left and right hemisphere style of learning to ensure that all the middle adolescents will be able to integrate the cognitive competencies by drawing upon their unique style of processing information.

#### **4.3.1.2. Frontal lobe**

The frontal lobe of the brain is involved with the regulating of the information received from the senses and the pre-frontal cortex with synthesis of the information. The frontal and pre-frontal parts of the brain as discussed in previous chapters are still developing within middle adolescents. *"The frontal lobe is often called the CEO, or the executive of the brain. It's involved with planning and strategizing and organizing, initiating attention and regulating attention. As the prefrontal cortex matures, teenagers can reason better, develop more control over impulses and make judgements better. In fact, this part of the brain has been dubbed 'the area of sober second thought' (Spinks, 2002: 2-3).* Brain research can contribute to education because it adds new understanding of the middle adolescents' functioning based on the areas involved within the brain necessary to assimilate and integrate resilience competencies and can guide the teacher and psychologist to choose activities linked to those areas in the brain that might strengthen the neural pathways associated with resilience.

The authors Wilson and Horch (2005:3) propose the following classroom activities that develop the neurological pathways in the brain that can foster cognitive competence:

- ❖ Planning project-based units of research where learners ask critical questions and then develop their own projects to find the answers, such as interviewing people. The Resilience Enhancement Kit can incorporate this suggestion by asking the middle adolescents to identify problems they experience in their school context and think of creative ways to solve the problems by identifying and utilizing resources available to them which may include interviewing significant role players for their advice, opinions or help.
- ❖ Using simulations to involve learners in understanding various points of view or discussing complex ethical issues. The Resilience Enhancement Kit can include activities such as role play, interviews and discussions related to the resilience topics such as empathy and how to work effectively in a group to solve problems.
- ❖ *"Playing music that links memory to specific learning tasks. Rhythmic patterns are effective memory tools for learning and music is a great medium for facilitating adolescents to make sensorimotor connections."* In the emotional- and social competency development in the Resilience Enhancement Kit music is an activity that is utilized to convey concepts such as empathy and friendship. Middle adolescents can also be asked to create their own form of music to convey their understanding of the concept taught.
- ❖ Having learners write reflectively every day to reiterate and consolidate learning. The Resilience Enhancement Kit can require the middle adolescent to reflect after each session on what they have learnt and how they can apply it to their lives which will enable them to understand the relevance of the resilience competencies to help them rebound. The Resiliency Scale can also include questions that relate to the middle

adolescent's ability to think reflectively and can be stated as follows: "I am aware of how I solve problems to get to the answers and I am able to retrace my steps".

- ❖ Visual and word problems or puzzles to challenge thinking so that learners understand that there are many ways to solve problems. This type of thinking strengthens the neural connections and gives learners more confidence in their abilities to address problems. The Resilience Enhancement Kit can include an activity such as solving a riddle (mystery) by analyzing the clues that are written on cards and placing them in the correct order to obtain the answers for the set questions which will focus on the middle adolescent's cognitive competencies. The Resiliency Scale could measure the middle adolescent's perspective on how he or she solves problems by the following: "I find answers to problems by finding different solutions and thinking about the possible results" and "I learn from previous mistakes and disappointments".
- ❖ Using physical challenges to solve problems and enhance teamwork. An activity in the Resilience Enhancement Kit that requires the middle adolescents to utilize their ability to solve problems and work together in a team can be to construct an object using only limited material in a specific timeframe.
- ❖ Involving learners in real-life apprenticeships. The Resilience Enhancement Kit could include activities such as asking the middle adolescents to plan and execute a school function where they get the opportunity to apply the competencies they have learnt in a real-life setting. The Resiliency Scale can measure the middle adolescent's willingness to engage in new learning experiences by stating the question as: "I am willing to try new ideas and experiences".
- ❖ Using peer cooperation helps expand middle adolescents' understanding of issues and promotes group problem solving. Due to the nature of the South African school population where there can be up to 40-60 learners

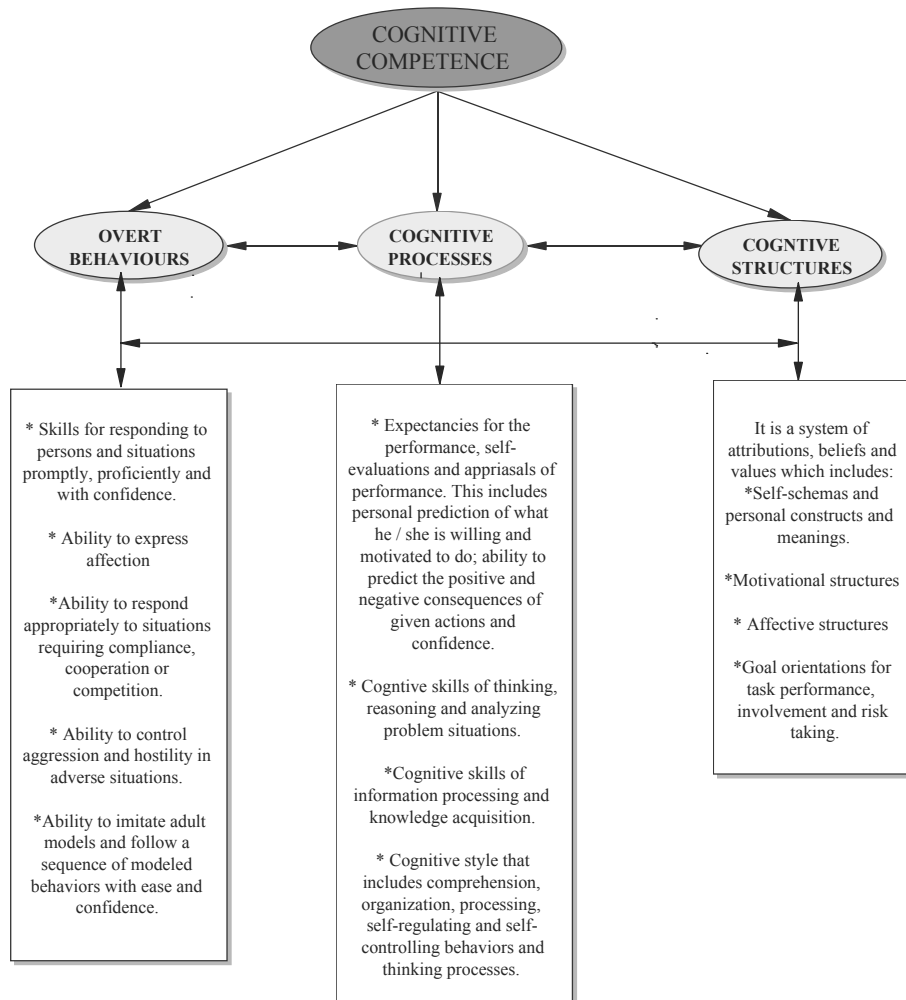
in a classroom, the activities in the Resilience Enhancement Kit should be structured to be implemented within groups as well as working in pairs which will also foster social learning. The Resiliency Scale can also inform on how middle adolescents utilize significant others to help them as part of their application of cognitive competencies and might be stated as follows: "When I need help, I find someone to talk to like teachers, family and friends" and "I have a role model whose good example I would like to follow".

The Resilience Enhancement Kit can enable the middle adolescent to learn the skills and attitudes that are necessary to solve problems and analyze situations in order to make informed decisions that will influence the way that they might rebound against the stressors of life. It is important to identify the theory underlying cognitive competencies of resilient functioning.

#### **4.4. Theory of cognitive competence**

Fry (1992:4-5) proposes the following conceptual framework for cognitive competence:

Diagram 8: (With permission: Appendix B).



This framework indicates that cognitive competence consists of cognitive structures, processes and overt behaviours that are interactive and interdependent. The cognitive structures incorporate the middle adolescent's system of meaning attribution to what he or she experiences. These meaning attributions is based on learned behaviour and influenced by the direct and indirect feedback a middle adolescent receives from parents, peers, teachers, psychologists and significant others regarding expected ways of thinking and behaving (schemas). Middle adolescent boys and girls seem to differ in their confidence, motivational and performance levels regarding the cognitive competencies that society expects these genders to excel in. The middle adolescent boys for example tend to be more confident about their mathematical



ability and solving mechanical related problems than females, while the middle adolescent girls on the other hand are more confident regarding their reading and organizational abilities. The gender roles and beliefs (schemas) attributed by society can limit the middle adolescents in the way that they approach novel tasks and problems in their lives. Conforming to gender stereotypes can affect the middle adolescent's confidence and motivational levels.

The socially constructed meaning a middle adolescent attaches to an activity, situation or future goal determines the degree to which he or she will participate in challenging situations as well as what aspects he or she will respond to, the level of involvement and motivation to persevere against all odds. Therefore, it is important that the middle adolescents are empowered to discover, develop and enhance their cognitive competencies and are socially unrestricted in the way that they utilize and apply them to adverse situations and stressors. This is where the Resilience Enhancement Kit could be of great value. In the Resilience Enhancement Kit the middle adolescents can explore different ways in managing and utilizing their cognitive competencies without being prescriptive of the way in which they should solve problems, make decisions or even express their creativity.

The second element of cognitive competence is cognitive processes, which refer to the higher order processes necessary to address the challenges in life. Fry (1992:8) describe the cognitive processes as "*the skills for self-appraisals, goal expectancies, metacognitive knowledge of problem solving skills and other cognitive skills such as learning strategies and information-processing style.*" The middle adolescent phase is characterised by self-centeredness and a focus on the present moment without always anticipating future implications. This has an effect on the way they evaluate and appraise their actions, process information as well as their willingness to think and respond differently during difficult times in their lives. It is the middle adolescents' ability to utilize their

meta-cognitive skills that can assist them in approaching stressors and adversities in an effective way. Meta-cognition is the wisdom of hindsight that serves as a mirror to the middle adolescent on his or her own knowledge, abilities and thinking. Metcalfe and Shimamura (1994:xii) describe the importance of meta-cognition as follows: *"its the ability of a human being to reflect on his or her conscious awareness of the world represents an evolved skill. The ability to reflect upon our thoughts and behaviours help us to learn, change and adapt to the events and contingencies in the social and physical environment. Humans can therefore monitor what is perceived, judge what is learned or what requires learning, problem solve and predict the consequences of future actions (decision-making)"*.

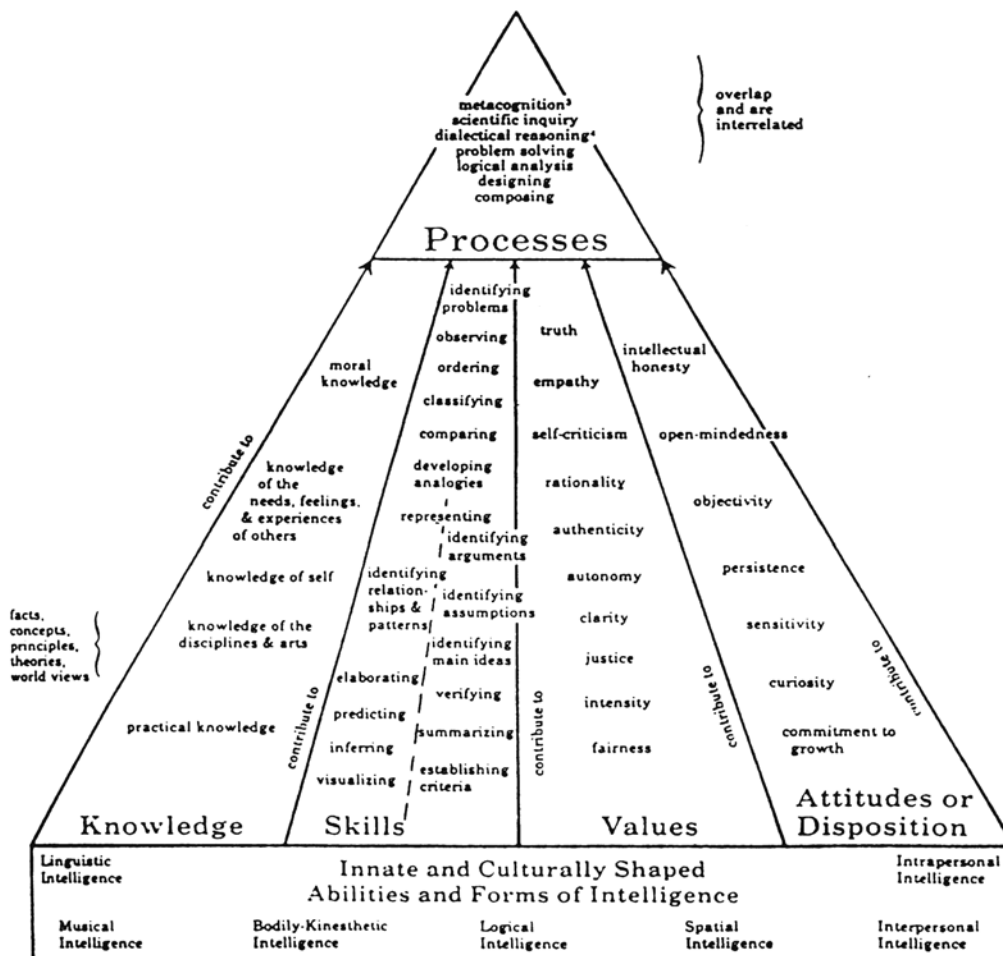
Middle adolescents however find it difficult to think about their thinking or why they respond the way they do. They tend to be overly dramatic by exaggerating their opinions and behaviours that reflect their self-centeredness for example that their opinion or views are more important to that of others or if they are reprimanded about what they said or did they do not always see any fault in how they reacted. Therefore, it is important that the teachers and psychologist in the school context focus on developing meta-cognition that forms part of cognitive competencies.

According to the model provided by Fry (1992:277), meta-cognition incorporates aspects such as reasoning, problem solving, decision-making and analyzing of information in order to know how to respond to it. The aspects that contribute to the middle adolescent utilizing the process of meta-cognition include drawing upon their attitudes, values, skills and knowledge that are shaped by their innate multiple intelligences as outlined by the theory of Howard Gardner and culturally shaped abilities. The attitudes that foster meta-cognition include objectivity in processing information, persistence, sensitivity towards others and curiosity. The

values that underlie meta-cognition as well as cognitive competence include autonomy, self-criticism, empathy and rationality.

The skills involved in meta-cognition that can be incorporated in the Resilience Enhancement Kit to enhance and develop cognitive competence include visualizing, identifying problems, observing, classifying and comparing, identifying relationships and patterns. The elements regarding knowledge that contribute to meta-cognition as well as cognitive competence include knowledge of the needs, feelings and experiences of others as well as knowledge of self. Fry (1992:277) illustrate all the aspects that contribute to the development of meta-cognition in the following diagram:

**Diagram 9: (With permission: Appendix B)**



3. Metacognition refers to knowledge of one's own thinking processes and products or anything related to them. It is "thinking about one's own thinking."  
 4. Dialectical reasoning involves metacognition and also includes thinking about the reasoning, motives and arguments of others. It includes seeing all sides of a question and analyzing the strengths and weaknesses of opposing points of view.

According to Fry (1992:151) enhancing meta-cognitive skills enables middle adolescents to use a variety of strategies to monitor their own performance and revise their executive strategies to become resourceful at remediating their own problems and self-managing their own thinking as well as enhancing the competencies necessary to accomplish the art of schooling (reading, writing, learning, thinking). Meta-cognition assists the middle adolescent in predicting positive and negative outcomes of events that lead to a sense of control over thoughts and feelings. Metcalfe and Shimamura (1994:xii) describe meta-cognition as a way to describe knowledge regarding what is perceived, remembered, thought and acted upon. Therefore, meta-cognition is an essential part of cognitive competence because it allows the middle adolescent to monitor, evaluate and control or regulate the acquisition of new information and retrieving the information to apply it to new situations. Fry (1992:193) provides some suggestions on how meta-cognition can be enhanced in the school context:

- ❖ *"Predicting the consequences of an action, activity or event;*
- ❖ *checking the results of one's actions and determine whether they had the desired effect or if necessary to be altered;*
- ❖ *monitoring one's ongoing activity with a view to assessing how one is doing;*
- ❖ *reality-testing with a view to determining if the activity is meaningful to self and others in the immediate environment;*
- ❖ *coordinating and controlling deliberate attempts to learn and solve problems."*

The middle adolescents are given the opportunity in the Resilience Enhancement Kit to actively participate and engage in the activities that requires the utilization of higher order thinking skills like the ones just discussed in a non threatening environment for example through game playing and structured board games. Reid (2001:8 and 17) reiterates the important cognitive competencies involved in participating in games that includes memory, concentration, anticipation of consequences, logical thinking and creative problem solving. He also states that

middle adolescents develop the capability to evaluate information and make realistic perceptions as well as develop skills regarding organizing and classifying of information. Consequently, games create an opportunity to learn new behaviours, self-reflection and self-understanding, which are cognitive processes that are essential to development. The Resiliency Scale could also include questions related to the cognitive processes that Fry considers an aspect of cognitive competence and can be stated as follows: "I feel I can handle many difficult situations at a time"; "when I make plans, I follow through with them" and "I can motivate myself to obtain my goals in life in order to succeed".

The cognitive structures and processes lead to overt behaviours according to the conceptual framework of Fry (1992:4-5). The overt behaviours are directly observable and are the manifestation of the application of the cognitive skills and processes preceding the behaviour. The overt behaviours are exhibited in the way the middle adolescent responds to significant people and situations in his or her life. If the middle adolescent responds in an appropriate way for example cooperating with others, complying with the rules and regulations of the school context and are able to model the appropriate behaviours then the middle adolescent is applying cognitive competence. The overt behaviours also relate to interpersonal (solving problems and making decisions) and intrapersonal (self-management, control, regulation and future goal setting) behaviours. *"Resilient children take a proactive rather than a reactive or passive approach to problem solving and decision making. This proactive approach requires children to be self-reliant and independent while at the same time socially adept enough to get appropriate help from adults and peers"* (Joseph, 1994:28).

The behaviour of the middle adolescent does not always reflect that they are utilizing their cognitive competence to solve problems, make decisions and regulate their own thinking or behaviour. They often do not think things through and will argue for the sake of arguing, jump to conclusions or find fault in what adults say or do. Middle adolescents seem to argue about issues for no apparent

reason and only do so to see how far adults will allow them to argue their point (also referred to as 'testing the borders') which can be highly frustrating to adults. Along with arguing middle adolescents also tend to jump to conclusions about what is being said and their faulty logic can lead to arguments between them, teachers and parents. The middle adolescents' ability to think critically (Piaget developmental stage) guides them to look for discrepancies, contradictions or ambiguities in what adults say which might even lead them to question adult's rules and boundaries. Middle adolescents can also provide solutions for problems that seem unrealistic to adults, which can be an indication that middle adolescents are not applying cognitive competencies in an appropriate manner. *"Adolescents see the world as it really is but they also envisage the world's possibilities, reality is therefore often lost sight of and utopian solutions are proposed for the world's problems. Adolescents may rebel against existing norms and values if their educators fail to empathize with their idealism"* (Gouws et al., 1994:54).

In order for teachers and psychologist to guide middle adolescents in changing the way that they think which will allow them to modify their behaviour, they have to be taught to think aloud. Thinking aloud will enable the teacher and psychologist to monitor the process of thinking to remediate any errors in the thought processes, construct meaning and to ascertain the underlying reasons why middle adolescents came to that specific solution for problems or decision. Middle adolescents are also able to interact and learn from each other's ways of thinking if they verbalize their thought processes. It is necessary for middle adolescents to start their thinking process audibly, later internalize it, and apply the principals through private dialogue and self-appraisals. In the Resilience Enhancement Kit the middle adolescents should be asked to verbalize and write down the process they followed in activities such as solving problems (mystery) or planning an event and answer questions that will guide them to think about their thinking and how it affected their behaviour.

Another concept of importance in understanding the theory of cognitive competence that affects resilient functioning is thinking style. Thinking styles are the preferences that middle adolescents have for thinking, relating to others within various learning environments and during social experiences. Reivich and Shatte (2002:3) describe thinking style as the way in which a middle adolescent respond and compare it to a lens through which the world is viewed and interpreted. Thinking style is the way middle adolescents perceive and understand the world around them and how they then translate that perception of the external world into an internal representation within their minds. Beddoes-Jones (2004:1) concurs with the views held by the previous authors and believe that a preferences for different styles of thinking guide behaviours. The middle adolescents' thinking style is the characteristic way of processing information. It is the way they acquire their knowledge, organize thoughts, form views and opinions, apply values, solve problems, make decisions, plan and express themselves to others. *"Non-resilient thinking styles can lead us to cling to inaccurate beliefs about the world and to inappropriate problem-solving strategies that burn through emotional energy and valuable resilience resources"* (Kordich-Hall et al., 2003:2).

Therefore, the way middle adolescents think about the negative events and experiences in their lives will influence the way in which they respond to the adversities of life. If middle adolescents think that an external force over which they have no control and subsequently can do nothing about causes the negative situation or event they will most likely succumb to the situation and will not be able to rebound. However, if they think about the negative situation or event in a positive frame of mind where the situation or event is seen as an opportunity to learn from and overcome then the middle adolescent will be able to rebound. Joseph (1994:192) is of opinion that if middle adolescents can learn to identify negative thought patterns and substitute them with realistic, constructive thoughts, school performance will be enhanced and emotions regulated that will have a positive effect on mental health.

Common thinking errors as identified by Joseph (1994:204) include overgeneralization, selective abstraction, arbitrary inference, minimization, dichotomous thinking and personalization that can influence the middle adolescent's ability to rebound. Overgeneralization refers to when the middle adolescent might think that a weakness in one area of their lives mean that he or she is weak in all the other areas of their lives, which leads to a defeatist attitude. Selective abstraction means that the middle adolescent might only focus on a single negative event that happened in their lives and as a result, they are unable to identify other positive experiences that will allow them to adapt and move on with their lives. Arbitrary inference refers to a thinking error where middle adolescents might come up with an evaluation of a situation or event that is not supported by fact and as a result, they are troubled by this presumption and might react in an inappropriate manner. Minimization refers to when a middle adolescent plays down the importance of positive event or situation in their lives because they have a lack in their belief of themselves. Dichotomous thinking are related to thoughts where events and situations are viewed as either right or wrong without considering the merits or context of the situation and as a result decisions are made that might not be in the most effective and productive. Personalization refers to when middle adolescents assume personal responsibility for situations and events that go wrong even when it is unrelated to them and as a result they develop a negative self-concept and they are unable to see the value their lives bring to others. Another thinking error that is common with middle adolescents are their presumption that everyone thinks as they do and should 'know' what is on their minds and what they need. This thinking error may cause disappointment and disillusionment when middle adolescents discover that adults and even peers do not necessarily view the world and events as they do.

Teachers and psychologists can utilize the Resilience Enhancement Kit to teach middle adolescents to change their negative thought patterns as discussed previously by using positive self-talk phrases that can help them reframe



negative thoughts and provide activities where the middle adolescent can practice different thinking skills through problem solving and decision-making steps with real-life scenarios. *"There are any numbers of forms for coping: wrestling the good out of a bad situation (e.g., recognizing that losing something frees you to do something you like better); finding a diversion (e.g., going to a movie as a break from a stressful task); reappraising the negative situation so that it does not appear as bad ('I decided it was not as bad as I thought or I know I can handle this'); making positive comparisons to another situation ('It could have been worse') and selectively attending to one part of the problem and putting the rest of the problem on hold. Problem-focused coping attacks the problem directly"* (Joseph, 1994: 37). These ways of coping can be taught to the middle adolescents in the Resilience Enhancement Kit as ways of reframing thinking. To understand how cognitive competencies might be enhanced the development thereof in middle adolescents must also be explored.

#### **4.5. Development of cognitive competence**

Kordich-Hall and Pearson (2003:2) affirm that resilient thinking patterns can be learned and the skills that support the consistent use of more accurate and flexible thinking can be gained from an early age which will increase resilient cognitive functioning. Cognitive competencies, consisting of a repertoire of competencies and procedures that enable learners to interact effectively within their ecosystemic context, develop through natural maturation as well as interaction with parents, peers, teachers, psychologists and significant others and mediated learning experiences.

Piaget (Donald et al., 1997:46) indicated that middle adolescents should be in the formal operational stage of their development, which implies that through processes of assimilation, accommodation and equilibration learners are able to think critically about the world around them and are able to find relationships between abstract information and situations. The formal operations stage described by Piaget (Mwamwenda, 1995:97) has its onset after the age of 12

years. *"A person capable of formal operations is able to engage in a high level of thinking without basing it on concrete evidence. He or she can make hypotheses, generalize and make conclusions that are scientifically sound. Only a few people attain the stage of formal operations, partly because successful performance at this level calls for abstraction and a fairly sound knowledge of basic concepts"* (Mwamwenda, 1995: 103). This developmental phase is characterised by a growing ability to communicate thoughts, utilize higher cognitive skills and make use of self-assertion to solve problems, make decisions and set future goals.

Middle adolescents however, often still function on the concrete operational stage because according to Mwamwenda (1995:103) they still see things from their own point of view without engaging in logical thinking on the basis of past experience and they make conclusions on the basis of insufficient evidence. This implies that the middle adolescents are still prone to think concretely and still have difficulty with foreseeing the logical consequences of their actions and as a result, they still need the guidance from adults to develop aspects such as problem solving, decision making and forming future goals. The level of a middle adolescents' maturity is an important predictor of whether they will engage in risky behaviours or make more responsible choices and decisions that will have an effect on resilient behaviour. *"Adolescents are capable of the following thought process: they think and reason about such concepts as love and hate, justice and injustice; they begin to display a sensitive attunement to the intentions and behaviour of other people; they are able to project into the past and the future and they are much more critical about themselves and constantly measure themselves against ideal models or against the peer group"* (Gouws et al., 1994:49). This implies that the middle adolescents are influenced by how their peers behave and think because they might fear being ostracized from a social group or being made fun of if they do not choose to conform to the peer group's way of thinking and behaving.

It is therefore important that the Resilience Enhancement Kit should focus on groups where the appropriate competencies can be reinforced and positive peer pressure be utilized under the guidance of a teacher or psychologist in the school context. Vygotsky is a theorist who provided a framework that teachers and psychologists can utilize to mediate the cognitive learning experiences of middle adolescents. The framework of drawing upon learners prior knowledge and skills and assisted guidance from teachers and psychologists can be utilized in the Resilience Enhancement Kit.

Fry (1992:53) is of opinion that Vygotsky's socio-instructional approach to cognitive competence examines the middle adolescents' cognitive functioning such as thinking, reasoning, problem solving not only in terms of individual development and independent functioning but also potential for growth in collaboration with other proficient adults and peers. Learners develop their cognitive competence (taking into account their zone of proximal development) through guidance and mediation to reach a level of independent functioning and internalization of the skills necessary. Once the cognitive skills, attitudes and values (competencies) are internalized, they become part of the middle adolescent's independent repertoire of appropriate behaviours that can be transferred to other situations.

The teacher and psychologist aid the middle adolescent to enhance present skills and develop new ones through support (instructional scaffolding). The psychologist, counsellor or teacher can structure the content of the activities according to the needs of the middle adolescent and the skills they need to master. The cultural and interpersonal relationships play an important part in learning from each other's socially constructed shared experiences an example of an activity is role-play. Fry (1992:11) supports the teaching of cognitive competence that includes self-monitoring, self-management and self-regulating skills. The value of cognitive competence in resilient functioning is the ability of middle adolescents to apply higher cognitive skills in managing and regulating

their thoughts to become active participants in solving problems, making decisions and setting goals in order to assist them in rebounding. Joseph (1994:31) state that a resilient middle adolescent will understand that he or she has some control over what happens to them by taking responsibility for decisions and the consequences thereof. The example set by significant others on how to execute these above-mentioned skills in everyday life can guide middle adolescents in modelling the same behaviours by including it in their cognitive schemas. The Resilience Enhancement Kit can teach the middle adolescents the cognitive competencies that include flexible thinking, solving problems, making realistic decisions and making future plans and goals through modelling, solving case scenarios and active participation in organizing activities in the school context.

Resilient thinking implies that the middle adolescent can utilize his or her cognitive competence to be flexible in applying different thinking strategies to gain a multi-perspective and objective approach to any situation or event. "*The pragmatics behind constructive thinking is largely geared to instructing children how to be mentally resilient. There are two major objective associated with this goal: (1) understanding how thoughts, feelings and behaviours influence each other and (2) taking charge of a destructive thought-feeling-behaviour cycle by changing thoughts*" (Joseph, 1994:212). Thus, in assisting middle adolescents to identify how they think and how to manage their thoughts so that it does not interfere with the decisions they make in life will empower them to become more resilient.

Joseph (1994:212) provided the following suggestions to break a destructive thought-feeling-behaviour cycle:

- ❖ Identify destructive thoughts;
- ❖ redefine situations by altering verbal labels and beliefs;
- ❖ create realistic and constructive thoughts and self-statements;

- ❖ redefine situations by creating solutions by focusing on a single aspect of the problem at a time, finding objective information of the problem, thinking about the worst thing that could happen as a way of objectively ranking the harmful impact of the situation and thinking of how the unfavourable situation can be turned into a benefit;
- ❖ redefine situations by creating alternative perspectives.

These steps can be included in the Resilience Enhancement Kit as part of the development and enhancement of cognitive competencies. Teachers and psychologists should look for patterns in middle adolescent's thinking. Being aware of the thinking patterns help teachers and psychologists to anticipate if the middle adolescents' thinking style will hinder resilient functioning. Therefore, it is important that teachers and psychologists who administer the Resilience Enhancement Kit should verbally express and model appropriate ways of how to think about adversities in life in order for middle adolescents to learn from example.

Joseph (1994: 195) suggests that teachers can utilize language to reinforce those attitudes and beliefs compatible with resilient thinking by using expressions that connote resilience. Teachers and psychologists should also know their own cognitive thinking style because it influences their preferred teaching methodologies. Understanding their own thinking style gives them an idea of how middle adolescents' thinking style is triggered by teaching patterns and how to present information to them in a way and at a pace which will allow the middle adolescents to think more effectively. By asking guiding questions as part of the activities in the Resilience Enhancement Kit, teachers and psychologists can scaffold middle adolescents thinking. Middle adolescents can be guided from their habitual thinking style to one that incorporates thinking critically, reflectively and creatively. Asking middle adolescents to analyze problems and stressors according to information available (facts) and then looking for the positives in the situation that could be of benefit and value in rebounding. Seeking the

possibilities and alternatives (new ideas and perspectives) and keeping in touch with their feelings, intuitions and goals middle adolescents might be directed to approach adversities as challenges to be overcome.

The Resiliency Scale should also include questions which relate to the middle adolescent's thinking style and can be stated as: "I am in control of my thinking, tend not to worry and think positively and keep negative events in perspective" and "I see change as a chance for personal growth". Joseph (1994:226) summarizes the importance of thinking style in cognitive resilience when he says, *"to a large degree we are what we think. When we think constructively, we make better decisions and consequently are more productive. Constructive thinking contributes to the effective management of change and adversity."* Thinking style is also an important aspect in how a middle adolescent solves problems, makes decisions and plan for the future.

Killen (2000:128) propose that problem solving can engage middle adolescents in seeking knowledge, processing information and applying ideas to real-world situations as well as motivating them and demonstrating practical means of applying existing knowledge to a new or unfamiliar situation. The circumstances that the middle adolescents find themselves everyday is infused with problems, stressors and challenges of a rapidly developing society which forge resilience. Problem solving engages middle adolescents to utilize their higher order thinking skills and including this skill as part of cognitive competencies empowers them to be able to adapt to new circumstances which also allows them to transfer their knowledge of how to rebound to other adverse situations. *"The sense of challenge, a characteristic of hardiness, is the ability to see the positive aspects of change and to minimize or get beyond the negative aspects of a situation. A person who sees life as a challenge is not only positive about life in general but also able to defuse the threat behind misfortune and extract opportunity from the change"* (Joseph, 1994: 31).

However, if the middle adolescent does not have the necessary competencies to solve problems they will be prone to either be overwhelmed by the situation or choose inappropriate ways of trying to escape the situation for example participating in risky behaviour such as underage drinking or abusing drugs. It is therefore the responsibility of teachers and psychologists to empower the middle adolescent with knowledge and skills to know how to solve problems in an appropriate way to help them rebound. Killen (2000:136) suggested the following ways in which teachers and psychologists can develop problem-solving skills in the school context:

- ❖ Identify what prior knowledge the learners have to solve problems;
- ❖ guide learners to resources that will help them to solve the problem;
- ❖ help the learners to discuss the problem in a small group form;
- ❖ encourage learners to use their own strategies for solving the problem. Praise their initiative, original ideas, resourcefulness and willingness to explore different approaches;
- ❖ challenge learner's logic and beliefs, perhaps by asking questions such as 'how can you justify your conclusion?';
- ❖ provide constructive feedback to correct erroneous reasoning;
- ❖ encourage learners to record their problem-solving processes and their conclusions;
- ❖ participate in problem solving with the learners so that you can model problems solving approaches.

These suggestions can be a guideline for teachers and psychologists administering the Resilience Enhancement Kit when the middle adolescents are asked to apply their problem solving skills in an activity where they can solve a mystery and identify problems in the school context as well as provide some suggestions on how the problems can be addressed. The middle adolescents' perceptions regarding their problem solving ability can also be measured in the Resiliency Scale through the questions: "I am aware of how I solve problems to get the answers"; "I find answers to problems by finding different solutions and

thinking about the possible results" and "if I am confronted with a difficult problem I will not give up, I will keep trying my best". Skills that are closely related to problem solving and are crucial aspects of cognitive competence is making decisions and setting future goals.

Decisions and choices are basic thinking skills, which start at an early age. As children grow older, they are forced to make decisions that are more independent and during middle adolescents, the choices they make will have an effect on their success to adapt to changing situations. Decision-making is the process of choosing what to do by considering the possible consequences of different choices. *"These decision-making processes mature with age and experience and are influenced by an adolescent's brain development and acquisition of knowledge. The issue of decision-making becomes increasingly important during adolescence because teens are developing greater autonomy and encountering more choices independent of adults"* (Brockman & Russell, 2002:1). Middle adolescents often make impulsive decisions without considering all the relevant information to make informed decisions.

The strain of taking on more responsibilities and addressing increasing challenges related to their developmental phase and academic expectations can cause strained relations with parents, teachers and peers that can cause the middle adolescents to make decisions intended to prove their maturity or to assert their independence. Undesirable decisions that middle adolescents make could also be caused by trying to avoid a situation or even to obtain a goal regardless of the possible risks involved for example a girl who chooses to become sexually active to gain the approval and acceptance of a boy she likes irregardless the threat of disease or teenage pregnancy. Brockman and Russell (2002:1) are of opinion that resilience in schools improves and problems prevented when programs teach middle adolescents decision-making; problem solving; social and self-regulation skills; refusal, resistance and coping strategies. Middle adolescents must be provided the opportunity in the school context to



practice using decision-making skills and be made aware of the consequences of the decisions they make especially related to their long-term wellbeing.

Brockman and Russell (2002:3) further suggests the following ways in which teachers and psychologists can develop and enhance decision-making skills in middle adolescents:

- ❖ *"Encouraging young people to search for new information when making decisions and helping them to avoid overestimating their knowledge and capabilities;*
- ❖ *using a general heuristic framework to help teenagers learn how to think critically about decision problems (e.g., "GOFER"-goals, options, facts, effects, and review; "going through the GOOP"-goals, options, outcomes, and probabilities);*
- ❖ *providing adolescents with opportunities to practice and rehearse decision-making skills;*
- ❖ *having teenagers work in pairs or small groups on relevant decision problems;*
- ❖ *teaching teens to identify potential consequences of each choice, assessing the likelihood of each consequence actually occurring and determining the importance of these consequences."*

These decision-making skills can be incorporated in the activities of the Resilience Enhancement Kit that can be structured that middle adolescents learn how the choices and decisions they make can influence them either negatively or positively. It is important that the teacher or psychologist who administers the Resilience Enhancement Kit explain the steps in the decision making process that can be illustrated in the form of a mind map. The teacher or psychologist who is administering the activities can ask the middle adolescents to choose between two unknown aspects for example two envelopes that contain activities that the middle adolescents have to perform that will have specific consequences.

Furthermore, the middle adolescents could exercise their decision-making skills in planning of a school event in a group that is related to a real-life experience. The Resiliency Scale should also include questions related to decision making and might be stated as follows: "I take responsibility for decisions I make, even if it was the wrong ones" and "my values guide the choices and plans I make". Decision-making is guided by the goals the middle adolescent wants to achieve. Having a sense of purpose and goals that can direct behaviour will empower the middle adolescent to look towards the future and not just focus on past failures or disappointments. A positive future orientation can be motivating to the middle adolescent and create a sense of purpose which is described by Joseph (1994:32) as a hardy personality.

The Resilience Enhancement Kit should focus on fostering a sense of future mindedness where the middle adolescents can set goals not only to make decisions but which can also serve as a motivation to persevere when life is tough. Activities could include setting long- and short-term goals in a school related project and discussions regarding future expectations. The Resiliency Scale should also include questions related to future orientated goals and can be stated as: "I am positive and hopeful about the future"; "I have several goals and plans for the future after I matriculate" and "I can motivate myself to obtain my goals in life in order to succeed". It is important for the teacher and psychologist to have knowledge regarding the middle adolescent's cognitive competence and this knowledge can be obtained through assessment instruments.

#### **4.6. Psychological appraisal of cognitive competence**

The level of cognitive competence is often measured by a middle adolescent's level of proficiency in academic subjects, aptitude scores or intelligence scores as reflected through the Senior South-African Intelligence Scale. Few assessment instruments encompass the cognitive competencies necessary for resilient functioning. Harter and Pike (2002:1) developed the following

assessment instrument to ascertain the middle adolescents' level of cognitive competence namely the "*Perceived Competence Scale for Children*." This assessment scale was developed for adolescents aged 8-18 years and consists of a 24-item instrument that is made up of subscales comprising of six items each that include cognitive competence, physical competence and peer acceptance.

The second assessment instrument that could be located related to cognitive competence is the PASS+S Dynamic Assessment instrument. Luria (Kline, 2003:2) developed a model of cognition that included four types of cognitive processing: planning (P), attention (A), and information coding through sequential (S) and simultaneous (S) processing. The PASS+S Dynamic Assessment was constructed to measure these four types of cognitive processing plus the speed of processing (+S), hence the acronym PASS+S. The PASS+S subtests were also devised to match Luria's descriptions of these processes and to represent the cognitive demands of the classroom context. Kline (2003) has not indicated the applicable age group for this assessment instrument. It must be reiterated that these above mentioned assessment instruments is normed according for the American population and are therefore not always applicable in the South African context.

The assessment instruments discussed also focuses on the processing part of cognitive competence and does not include the cognitive structures or overt behaviours related to cognitive competence as described in the theory thereof. This implies that the need remains for an assessment instrument that incorporates all the elements of cognitive competence for resilient functioning. The Resilience Enhancement Kit contains a resiliency scale for learners and teachers that might address this need and assist the teachers and Educational psychologists in identifying the learner's level of cognitive competence for use in the school context.

#### **4.7. Cognitive resilience and school context**

The teacher's role in facilitating cognitive competence includes structuring and planning activities, assignments and lessons that incorporate meta-cognition and foster positive future expectations and goals. The middle adolescents' development should be kept in mind when developing activities to ensure that the content is optimally integrated in their frame of reference. *"The educator should be aware that the middle adolescent may be capable of formal-operational thought on one day, only to laps back to the concrete-operational phase the very next day. Therefore, teaching should start from concrete considerations, building up where applicable to more abstract reasoning. It is important to expose adolescents to a variety of experiences in order to promote their development of a capacity for flexible, versatile thinking"* (Gouws, et.al., 1994: 71). Teachers and psychologists should attempt to integrate the middle adolescent's innate abilities, interest, experiences and background knowledge when designing activities.

It is for this reason that the activities in the Resilience Enhancement Kit should appeal to the interest of the middle adolescent as well as incorporate all their senses in developing resilient competencies. Mwamwenda (1995:104) restates that teachers should facilitate and instruct in a manner that will incorporate the middle adolescents' use of their senses and provide concrete material to consolidate concepts being taught. The middle adolescents should be actively involved in applying the cognitive competencies to ensure that it is internalized. Fry (1992:269) is of opinion that most schools have a superficial understanding of how problem solving and decision-making skills should be taught. *"Educators and psychologists are in agreement that educational reform is necessary in our schools if cognitive competence is to be fostered. These educators promote developing innovative programs of teaching, instruction and interventions of behalf of children and have argued that new ground needs to be broken in an effort to put children in control of their own learning and cognitive competence"* (Fry, 1992:301). Teachers should provide learners with real-life materials and opportunities to apply their higher order thought processes and increase their

motivation to think reflectively about the world around them. Higher order thinking is the ability to integrate learning, thinking, reflective reasoning and problem solving. A lack of meta-cognitive skills and a rigid thinking style make middle adolescents vulnerable to succumbing to stressors and adversities. Cognitive competence allows the learner to become an active participant in his or her own learning in order to face the challenges posed in their life world. The school play an important role in fostering citizens who are able to solve problems, think critically and creatively and thereby contribute to an ever-changing society.

#### **4.8. Conclusion**

In this chapter the nature, origin, theories and development of cognitive competence was discussed. It became apparent that the middle adolescent is still developing in the areas associated with cognitive competence as outlined by Piaget's stages of cognitive development as well as the brain areas associated with higher order thinking. The importance of the school as a vehicle to promote cognitive competence was highlighted. The significant adults working with the middle adolescent in the school context (teacher and psychologists) should be aware of how the middle adolescent think about their life world and how they approach problems and decisions in their lives. It became clear that the teacher and psychologist should also be aware of how their thinking style affects the way they model behaviour to rebound.

The activities in the classroom should be structured that the middle adolescent is given the opportunity to practice their cognitive competencies and learn from interaction with others how to apply their resilience competencies to rebound. It was found that cognitive competence comprises of more than just cognitive processes but is an amalgamation of a flexible thinking style, problem solving and decision-making competencies and a positive future-orientated mindset where goal setting can be a motivator to persevere against life's onslaughts.

The middle adolescent gives meaning to what has been experienced and utilizes the necessary skills, knowledge and values to solve problems, make informed decisions and plan future goals. In becoming active participants in managing their thought processes, middle adolescents can self-regulate their thoughts and competencies to manage life's stressors. In the exploration of the chapter it also became clear that there is a need for assessment instruments that encompass all the elements of cognitive competence.

The next chapter gives a detailed outline of the Resilience Enhancement Kit as well as the Resiliency scale that can be utilized in developing, enhancing and appraising the resilience modalities within the school context.

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| <p>CHAPTER 5</p> <p>Resilience Enhancement Kit</p> <p>Design</p> |
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*"Although the world is full of suffering it is also full of the overcoming of it. For we carry within us the wonders we seek"*

*(Freedman, Rideout. & Jensen quotes Hellen Keller, 1998:35).*

### **5.1. Introduction**

South Africa is continuously changing and developing society where information is constantly expanding and knowledge regarding the needs of middle adolescents within the school system improved, in order to guide them to become competent and well-rounded members of society who can contribute towards a productive civilization. Continuous research in Educational Psychology is necessary to address the needs of the middle adolescents and to improve the delivery of services to them. *"The Educational psychologists is a problem-solving consultant, an in service trainer, a system analyst, and an advisor. The aim is to identify what kind of areas of work, based on psychological research and practice would bring about an improvement in school practice"* (Sharratt, 1995:212). The Educational psychologists have direct and indirect services that they provide to schools, families, community and the education authorities. These services in the school context include the following:

- ❖ Provision of assessment and evaluation.
- ❖ Consultation and advisory services.
- ❖ Collaboration with multi-disciplinary teams.
- ❖ Support and therapeutic interventions for learners and their families.
- ❖ The continuous development of services, programs and policies for the schools.

- ❖ Early intervention and preventative work with middle adolescents, groups, school and families.
- ❖ Workshops to share information to parents, teachers and members of the community with regard to the optimal learning and development of learners in a complex and interdependent social system.
- ❖ Training focused on instructional strategies and adaptation of the curriculum to address the middle adolescents' needs.
- ❖ Evaluation and development of policies and practices that foster whole school development as well as lending support for the changing school system that functions as an organisation that embraces inclusive practices.
- ❖ The identifying of future changes, the analyzing of middle adolescent needs and suggestions on how to address these needs through curriculum and organisational development. "*The task of the Educational Psychology is to achieve theoretical understanding of how the internal (psychological) structures supporting conceptions of truth and value are developed in children through interactions with teachers, parents, peers etc., and the application of this theoretical knowledge to practice in the form of curriculum planning and design*" (Sharrat, 1995:215).
- ❖ The training and support of teachers, principals, assistants, parents and professional services within the school framework to foster the principals of Outcomes Based Education and inclusion.
- ❖ Guidance with regard to optimally utilizing the resources in the community and the development of support networks. "*Educational psychologists encourage the establishment of inclusion task forces and the designation of a support facilitator to work with classroom teachers and other personnel to encourage inclusive practices, locate resources and even team teach*" (Sharrat, 1995:13).



In the light of the services that the Educational psychologist provides to the school community, the contribution presented in this research to the Educational Psychology field within the school context emerged. The changing education system in South Africa posed not only a challenge in developing middle adolescents to think critically, utilize skills and become actively involved in the learning process but also emphasized the need for them to exhibit the apposite resilience competencies that would enable them to rebound against adversity, changes and risks in a changing society. This research aims to add to the knowledge base concerning ways to appraise, enhance and develop resiliency competencies by amalgamating research and developing activities that take into account the middle adolescents' developmental phase as well as ways of facilitating the process of resilience enhancement in the school context. The Resilience Enhancement Kit empowers teachers and psychologists to provide a learner centred assistance based on middle adolescent needs, which is multi-cultural and inclusive of all middle adolescents. The Resilience Enhancement Kit enables the significant role players in the school system to appraise and enhance the learner's resilience modalities in a non-threatening and enjoyable manner. The competencies underlying the resilience modalities that are represented in the Resilience Enhancement Kit will be outlined and discussed hereafter.

## **5.2. The resilience modalities**

### **5.2.1. Emotional competencies**

#### **5.2.1.1. Identifying and managing emotions**

Developing the sensitivity to identify emotions starts at an early age. Parents teach their children the basic emotions of happiness, sadness, anger, loneliness and fear by association. As a result middle adolescents can also learn unfavorable ways of expressing emotions through modeling the example of adults (e.g. anger and intolerance exhibited in road-rage). Unfortunately parents and teachers do not always have the necessary skills themselves to teach children and middle adolescents how to identify and manage emotions. The

experience of emotions often becomes automatic and no thought is given to why a middle adolescent feels like he or she does, what gives rise to that emotion or how that middle adolescent expresses that emotion. Self reflection and management of emotions are necessary to break the linear cycle of cause and effect, action and reaction, which could lead to emotional problems. Teachers, psychologists and significant others can function as facilitators in developing positive emotions which has a favorable impact on learning and general wellbeing. *"Positive emotions and related positive states have been linked to broadened scopes of attention, cognition and action and enhanced physical, intellectual and social resources. Positive emotions produce patterns of thought that are notably creative and receptive for cognitive content. Positive emotions, when channeled into effective prevention, treatment and coping strategies (resilient competencies) should be especially effective for counteracting psychological (e.g. anxiety disorders), physiological and behavioral (e.g. aggression) problems"* (Fredrickson, 2000:5). The intricate nuances and blends of emotions are identified through observing how middle adolescents' react to various situations that can allow teachers and psychologists to make the middle adolescents aware of how they express their emotions. Farnette, Forte and Loss (1991:9) suggest the following ways in which emotions can be identified:

- ❖ Emotions can be identified by asking middle adolescent to link emotions to situations that elicit an emotional reaction.
- ❖ Emotions can be identified by looking at the expressions of others and labeling the expression with an emotion.
- ❖ Categorizing emotions according to "good" and "bad".
- ❖ Making middle adolescents aware of how emotions affect the body by associating the feelings in the body with concrete objects (for example being tense is a tightly stretched rope).

The ways of identifying emotions can be incorporated within the Resilience Enhancement Kit where the identification of emotional expression can be taught with the aid of pictures as well as activities where the middle adolescent are

given the opportunity to reflect the emotions recognized in others. Labeling emotions and giving the middle adolescents the opportunity to link them to real-life scenarios can also be a way that the Resilience Enhancement Kit can foster identification of emotions. The following ways to enhance and develop the competencies to manage and appropriately express emotions are proposed by the National Association of School Psychologists (2001:4) and can be summarized as follows:

- ❖ Teaching and developing relaxation skills that could include meditation, progressive muscle relaxation and imagery exercises. *"Relaxation carries the urge not only to savor the moment but also to integrate those momentary experiences into an enriched appreciation of one's place in the world. People who practice relaxation techniques not only gain practical skills for managing subsequent stressors, but also develop more complex and resilient views of themselves"* (Fredrickson 2000:8).
- ❖ The method to stop, breathe, visualizing a serene scene as a calming and relaxing effect and then to ponder "what emotion am I experiencing now and why" can be effective in managing emotions.
- ❖ Developing the skills to identify verbal and non-verbal cues that reflect emotions.
- ❖ Identifying assets that could function as appropriate outlets for emotions like hobbies or sport also aids in the management and expression of emotions.
- ❖ The impact of positive "I-messages" or self-talk reinforces the middle adolescent's ability to accept favorable emotions and challenge unfavorable ones. This ability also has an influence on the middle adolescent's self-image.
- ❖ In the motion picture regarding Dr. Patch Adam's life his philosophy that laughter (humour) cures the soul became apparent and still rings true today. It is especially relevant in the management of emotions.

The Resilience Enhancement Kit incorporates these above mentioned ways of managing emotions where theory is put into practice. The activities can be structured that the middle adolescents are taught the skills to manage their emotions by choosing appropriate outlets; using positive self-messages as well

as strategies to calm themselves and gain control of their emotions. A detailed outline of the practical application of all the resilience modalities will be provided further in the chapter. An extension of expressing and understanding emotions is the middle adolescent's ability to empathize by displaying a considerate, caring and an unselfish concern for the welfare of others. This emotional competency is a very significant asset in functioning within a diverse society. Empathy is the second aspect dealt with in the Resilience Enhancement Kit.

#### **5.2.1.2. Empathy**

South Africa is a multi-cultural country comprising of an array of different people diverse in languages, traditions, ethnicities and abilities. It is vital that schools develop and foster competencies, which will enable the middle adolescent to function effectively in this diverse society. One such competency is empathy. Empathy is to cognitively perceive and understand other people's emotions and behaviour from their frame of reference, and then to affectively communicate that understanding and personal emotions it evoked, on a verbal and non-verbal manner. Schools are a microcosm of the society as a whole. Middle adolescents need to develop and cultivate this competency within an environment where there is guidance. *"The business of schools is to seek to develop in young people the character traits we associate with goodness, traits such as kindness, generosity, compassion and helpfulness. Successful learners are knowledgeable, self-determined, strategic and emphatic. That is, in addition to having knowledge, including critical and creative faculties; motivation to learn and confidence about themselves as learners; and tools and strategies for acquiring, evaluating and applying knowledge they also have insight into the motives, feelings and behaviour of others and the ability to communicate this understanding"* (Cotton, 2002:1). Empathy and pro-social behaviour (sharing, helping, acceptance, respect and comforting) are intertwined. Cotton (2002:5) and Freedman, Rideout and Jensen (1998:28) conclude that there are several ways of developing and enhancing empathy:

- ❖ Modelling of empathetic, caring behaviour through role-play or significant role models in society.
- ❖ Developing the skill of explaining and reasoning why certain behaviours are harmful to others and developing the appropriate behaviour in particular settings.
- ❖ Discussing emotions and problems positively.
- ❖ Giving positive comments by teachers, psychologist, peers and significant others for pro-social emphatic behaviour.
- ❖ Practising interpersonal perception and empathetic responding.
- ❖ Focusing on similarities between one self and another middle adolescent (group work).
- ❖ Exposure to emotionally arousing stimuli (e.g. films or pictures) which can foster a discussion in identifying needs and personal responses regarding the specific situation.
- ❖ Community service and interaction with for example the elderly, sick, disadvantaged and disabled where these above-mentioned skills can be implemented.
- ❖ Developing non-verbal communication and listening skills to convey positive messages (e.g. eye contact, body posture etc.).

It is vital that these skills must not just be a once-off occurrence, but a continuous process where the older adolescents can be engaged in peer teaching and a support. Empathy creates a much-needed caring and tolerant community. Emotionally resilient middle adolescents care about the people around them and they are not only focused on themselves and their needs and goals. The Resilience Enhancement Kit can include the discussed ways of enhancing and developing empathy through activities such as identifying role models and identifying empathetic behaviour, discussions as well as positive feedback from teachers and psychologists. The third aspect of emotional competency includes the learner's ability to apply self-regulation and delay gratification.

### 5.2.1.3. Ego-control and ego-resiliency

The terms ego-control and ego-resiliency are often used interchangeably, but they are different in nature. Due to the self-centered nature of middle adolescents this is a competency that is particularly difficult for them and is not purposefully taught at schools which intensifies the need for this emotional competency to be developed. Ego-control is the extent or degree to which a middle adolescent has the ability to defer immediate gratification and inhibit impulses in order to obtain future goals. Ego-resiliency refers to the middle adolescent's ability to flexibly adapt and accommodate the demands of different situations. Ego-resiliency encompasses the middle adolescent's ability to direct and apply personal rigidity, spontaneity, impulses and self-restraint for the appropriate situations.

*"Ego control refers to the degree to which middle adolescents express their impulses. Ego resiliency describes the internal personality structures that function to modulate these impulses adaptively. Ego-under controlled middle adolescents are described as spontaneous, emotionally expressive and focused on the immediate gratification of desires. At the other extreme are Ego-over controlled middle adolescents, who are relatively constrained and inhibited and who tend toward minimal expression of their impulses and emotions" (Huey & Weisz, 1994:404).*

Middle adolescents who exhibit ego-brittleness are more prone to develop problems at school that could include behavioural problems like hyperactivity, acting-out, anxiety, and withdrawal. Naser, Sandman (2000:2), Huey and Weisz (1994:404) identified the following aspects based on the Ego Resiliency Scale 89 and the Five-Factor Model of Personality which is important in the development of ego-control and ego-resiliency:

- ❖ Being an active participant in new activities and challenges with peers where they are required to wait their turn is important in developing ego-resilience and ego-control.
- ❖ Openness and exposure to new experiences will give the middle adolescent the opportunity to practise acquired skills.

- ❖ Developing the skills for conscientious task completion, goal directedness and persistency will foster ego-resilience and ego-control. Group work is a favourable method in developing this skill. Teaching organisational skills will also be an asset.

Middle adolescents often internalise or externalise the problems they experience. Developing appropriate skills to manage this based on reality testing is an important aspect of resiliency and according to Richardson (2000:247) behaviour modification can be utilized to teach middle adolescents self-management and to delay immediate gratification by asking middle adolescents to compare their exhibited behaviour with on-task requirements and what the teacher require of them to do at that time. The activities in the Resilience Enhancement Kit that foster ego-resiliency will be conducted in a group where the middle adolescents have the opportunity for social learning and can function as monitors regarding their peer's behaviour, for example if they are reacting impulsively or are unrealistic in what they say. The Resilience Enhancement Kit can also provide the opportunity for the middle adolescents to practice skills such as delaying of immediate gratification. The social modality of resilience is the next section dealt with in the Resilience Enhancement Kit.

## **5.2.2. Social competencies**

### **5.2.2.1. The ability to form and maintain positive relationships**

The formation and maintenance of positive relationships with peers, teachers, parents and significant others is an important developmental function during middle adolescents. Learning how to interact socially during recreational activities is one of the first exercises middle adolescents have of developing positive relationships in the form of friendships. Peer isolation or rejection could lead to a variety of problems such as school phobia and depression etc. *"Through the successful formation of friendships, adolescents learn social skills such as co-operation, sharing and conflict management. Friendship also foster*

*their sense of group belonging and has an enduring impact on the adolescent's social adjustment in later life" (Webster-Stratton, 1999:256).* The school is the ideal context to foster positive relationships and teach appropriate social interaction between peers because of the group dynamics present in a classroom. It can be concluded that children or adolescents unconsciously decide whether to be friends or initiate a relationship with someone by asking possible core questions such as:

- Is this person fun to be with?
- Is this person trustworthy?
- Will this person have a positive influence for him or her?
- Will this person help him or her achieve his or her goals?
- Does this person make him or her feel good about himself or herself?
- Does this person have similar interests to him or her?

Webster-Stratton (1999:259) and Schilling (1996:113) suggest the following ways of fostering the initiation of new relationships:

- ❖ Teachers can instruct middle adolescents in a variety of openers and closers when initiating a conversation.
- ❖ Middle adolescents can be taught to become aware of their listening skills self-disclose skills and choice of appropriate conversational topics.
- ❖ Modelling and reinforcing appropriate social scripts with regard to the following behaviours like sharing, making a suggestion, asking for permission, taking turns, giving a compliment, asking for help and being polite.

Modifying classroom management to include activities that will foster interaction will enhance relationships such as group projects, seating arrangement and peer tutors. *"Classroom practice in many subjects of the curriculum makes social demands on pupils, through working in groups, making or responding to presentations from others, dealing appropriately with social rules and authority relationships and more generally operating effectively within a social environment with peers" (Bremner & Topping, 1998:6).* The following aspects can be utilized to foster social competencies:



- ❖ Role-playing different social skills allows middle adolescent to understand each other in their middle adolescent contexts. Richardson (2000:248) reinforces the necessity to model pro-social behaviours throughout the school day and have learners practice them.
- ❖ Interactive discussion groups that allow middle adolescents to share their thoughts on belonging to a group and acceptable peer behaviour.
- ❖ Asking the middle adolescents to write positive statements about the other members of the group that can be shared with them is an effective way not only to enhance self perception but also a deeper understanding of the unique qualities that make an middle adolescent valuable as a friend.

The Resilience Enhancement Kit provides the learners with the skills to form friendships and work effectively within groups. The activities that are related to the formation of positive relationships, particularly friendship that is important for middle adolescents could be to ask them to apply the competencies taught (through interviews and role-playing) regarding interaction and establishment of relationships on an individual basis or in groups. Most of the activities in the Resilience Enhancement Kit should be conducted in groups to ensure that the middle adolescents receive exposure to practice their relationship skills on a continuous basis with the guidance of the teacher or psychologists. The ability to initiate and maintain relationships are closely related to the middle adolescents' ability to communicate effectively.

#### **5.2.2.2. The ability to communicate effectively on a verbal and non-verbal level**

*"Words show a man's wit but actions show his meaning"* (Freedman et al., 1998:45). Conveying a message does not only rely on the spoken content but also on the non-verbal gestures that the messenger displays. Non-verbal communication includes personal space, touch, facial expression, body language and tone of voice. Every culture has rules about the correct use of personal space. There are unwritten rules that are never taught, but they are very influential and known to all members of the culture. In South Africa for example

the African cultures have a close proximity regarding the allowed space between two individuals to that of the Western cultures.

It is therefore important that the middle adolescents be taught to respect the various cultures and learn from each other to avoid misunderstandings. Touch is the way in which one middle adolescent can convey understanding, empathy or love but middle adolescents need to know the appropriateness thereof within the various cultural contexts. Although younger children tend to shy away from physical contact, the middle adolescents tend to show more physical contact that can be seen in the way that they greet each other in unique ways, girls tend to walk arm in arm as a sign of support and boys tend to bump each other around in a teasing and playful way. Physical contact can also be observed between the genders especially when the middle adolescents are in romantic relationships and will often be seen holding hands and hugging. The face is one of the most powerful channels of non-verbal communication. Recognizing expressions on a face is closely related to the identification of emotions. Gestures made through body language can also differ between cultures and must therefore be interpreted with caution. On the basis of a middle adolescent's facial expression and body language it is possible to know when to engage in conversation or to withdraw. These accurate reading of non-verbal signals can aid in the development of relationships. The human voice reveals the ways in which voices communicate important clues about who that middle adolescent is and what he or she feels. The voice functions as the emotional carrier of the message. Although the appropriate content of the message (verbal communication) is significant, the non-verbal communication conveys the meaning of what is being said. Rourke (1994:1) suggests the following ways in which verbal and non-verbal communication can be enhanced:

- ❖ Middle adolescents can make a journal of their peer's non-verbal cues and discuss them with the facilitator.

- ❖ The appropriate communication style can be taught through modelling and role playing for different situations for example what to say, how to say it, when to say certain words.
- ❖ Teaching strategies during a conversation can serve as a guideline to middle adolescents for example to stop, look, listen and weigh alternatives in confusing situations in a conversation.
- ❖ Middle adolescents can be made aware to observe non-verbal cues and deduce the meaning behind it.
- ❖ An explanation of the rules regarding social problems may assist him or her in obtaining all the information he or she needs in social situations before making any decisions to act.
- ❖ Reinforcement through experiences for example meeting a substitute teacher, going on a field trip or a change in schedule, can build on learned skills.
- ❖ Use verbal rehearsal and step-by-step instruction or modelling in anticipation of novel experiences.
- ❖ Promote self advocacy and positive reinforcement by helping him or her know his or her strengths in learning new social skills.

An activity in the Resilience Enhancement Kit that can be utilized to explain to middle adolescents about communication is teacher demonstration. The teacher can demonstrate what is meant by non-verbal communication such as personal space, touch, facial expression and body language by demonstrating and discussing the appropriateness of these behaviors and how it affects the people around them. The middle adolescents could also be asked to role play a scenario where the other middle adolescents have to deduce what has been shown, some of the middle adolescents may speak while others may just play the role of a mime. Structuring activities so that the middle adolescents are asked to look for positive characteristics in others and give them compliments also guide them to

communicate in an appropriate way without just focusing on the negative. An important aspect in communication and social wellbeing is having a sense of humour with regard to life's difficulties and personal setbacks. This ability allows a middle adolescent to rebound swifter from adversities.

### **5.2.2.3. Sense of humour**

*"Humour is a complex interpersonal dynamic that has positive emotional, physical and cognitive effects. Laughter stimulates imagination, creativity and problem solving skills. It is essential to sanity and survival, it is a tonic for loneliness and depression and it is the foundation of positive social interaction"* (Freedman et al., 1998:25). By interacting with middle adolescents, it becomes apparent that they have the ability to recognise humour or elicit the humorous in daily life. If a middle adolescent is able to laugh at himself or herself with regard to daily pressures or mistakes that has been made it paves the way for resilient behaviour. Teachers or Educational psychologists can enhance and develop a sense of humour in middle adolescents through the following:

- ❖ Modelling behaviour that illustrates that making mistakes is part of a learning process and can be enjoyed as well.
- ❖ Using the media for example newspapers or the television to illuminate the humorous things people do, even high standing individuals like movie stars.
- ❖ Purposefully committing to adding humour to everyday life for example sharing funny stories or jokes.

To the middle adolescents humour is an indirect way of coming to terms with aspects in their development that can be emotionally stressful and as a result, they often joke about it. These jokes can include making fun of (teasing) someone's appearance or behaviour that can also be sexual in nature. Jokes provide an opportunity to determine cultural norms and acceptable behaviour and can mask the middle adolescents' insecurities as they try to fit in with the peer group. It offers them a chance to try out boundaries and if necessary, retreat from it by saying "I was just joking." Humour is also used to determine who becomes a

member of a group based on their shared sense of humour. In South Africa, the black middle adolescent has an open sense of humour where they will imitate behaviours and laugh at each other. The white middle adolescent appears to have a subtle sense of humour with the emphasis on wordplay. Humour such as puns or reversals could pose challenges in a classroom with second language learners from other cultures and it will require the teacher to provide the background knowledge and context to make the humour accessible to all.

However, with guidance the middle adolescent can be made aware of the underlying lesson in humour and jokes. The joy of interacting, communicating and participating within a group while sharing thoughts, feelings and learning experiences related to the activities in the Resilience Enhancement Kit can provide a context where humour can occur naturally and where the teacher can harness it to alleviate tension. The nature of the large groups of learners in the South African schools makes it necessary to develop activities that can be administered in groups. Therefore, the Resilience Enhancement Kit largely makes use of activities where middle adolescents can participate in groups.

#### **5.2.2.4. Working effectively within a group**

Social competence can be enhanced and developed through participation within a group where the opportunity is given for cooperative learning. Group work forms a fundamental part of the South African education system that requires middle adolescents to work productively on academic content while at the same time developing social interpersonal skills. As social beings middle adolescents are interdependent upon each other and learning becomes effective if the content is explored and discovered within the secure and guided framework of a peer group. Johnson, Johnson and Holubec (1998:3) identified the following skills needed for cooperative social learning:

- ❖ **Forming skills:** The basic skills needed for a functioning, cooperative learning group (taking turns, using quiet voices). Forming skills help

organize the group and establish minimum norms for appropriate behaviours.

- ❖ **Functioning skills:** The skills needed to manage the group's activities to complete a task and to maintain effective working relationships among members. Learners need to share ideas and opinions; ask for facts and reasoning that will ease their interaction and thus their understanding of each other's work, express feelings and provide support.
- ❖ **Formulating skills:** The skills needed to understand the material being studied at a deeper level, to stimulate the use of reasoning strategies, and to maximize mastery and retention. This requires the learners to actively engage with each other, correcting each other, seeking elaboration and helping each other understand the task at hand.
- ❖ **Fermenting skills:** The skills needed to rethink the material being studied, manage cognitive conflict, search for more information, and communicate the rationale behind one's conclusion. This requires positively criticizing without breaking down other people, generating further answers and testing the work against reality.

Although the middle adolescent is capable of these skills they still need the guidance of a teacher in structuring the work in the group and keeping them on track with the requirements. In utilizing the Resilience Enhancement Kit the teacher or psychologist should be prepared for the group work and have a clear aim of what the middle adolescents are expected to do. Management of the groups will require that the teacher or psychologist should define roles and responsibilities of the members in the group, set guidelines of what is expected of the middle adolescents, encourage discussions and be aware of any learner who is not being included; guide the middle adolescents on how to disagree appropriately as well as stating their views. The teacher or psychologist should also reinforce the competencies acquired such as empathy, expressing emotions and ways of verbal and non-verbal communication.

Activities that require the middle adolescents to work within a group fosters social competence and allows them to utilize each other as valuable assets in solving problems, generating new ideas or providing support in trying times. Providing group activities that require the middle adolescent to work as a team in solving a problem, acting out a social situation or giving positive peer feedback will reinforce the acquired skills provided through demonstration, explanation or modelling. Although being accepted and participating within a group is essential, the self-efficacy the middle adolescent exhibits within the group stems from a positive self-identity and self perception.

**5.2.2.5. Sense of self (Self identity, positive self perception and self-efficacy)**

Resilience is linked to a positive attitude, a sense self worth and personal control. Those middle adolescents who manage the changes of life effectively have learned to view themselves as valuable, even when making mistakes. They also have a sense of self-worth when they do not have the approval of everyone in their lives. The resilient middle adolescent displays the ability to learn from the lessons in the school of life which is the antidote to feeling victimized or rendered powerless to the influences of the environment. Social modalities of resilience enhance the middle adolescents' feelings of self worth that in turn leads to their ability to exhibit self-efficacy. *"People who show resilience generally have been treated with appreciation, care and love from early childhood on. They have learned to see themselves in a positive light and to see themselves as people who deserve to be treated with respect by others. When a life disruption creates an assault to their self-image, they are able to restore their feelings of self-esteem quickly"* (Bellafiore 2003:2). A well developed self-identity and self perception require of the middle adolescents to reframe their thoughts and feelings about who they are and what they are capable of.

The middle adolescents' self identity and self perception are influenced by subjective experiences regarding who they are and the contributions they can make to the world. Social influences such as motives, social roles, the social groups they belong to and how they are regarded by the people around them will affect the middle adolescents' social competence with regard to their ability to assert themselves within social contexts.

De Klerk and Le Roux (2004:36) provide the following ways of enhancing self-identity and self-perception that can lead to self-efficacy:

- ❖ Gaining self-knowledge through self-analysis regarding strengths, abilities and personality for example by means of worksheets, collages and group discussions.
- ❖ The meaning the middle adolescent gives to his or her reality might need to be reframed in terms of accepting himself or herself and comparing self perceptions to reality. This can be obtained by positive peer feedback and focusing on the strengths of the middle adolescent rather than the weaknesses for example compiling a balance sheet with positive traits.
- ❖ Modelling positive self-messages to encourage and develop a positive self concept even in the face of disappointments or mistakes can create a safe environment where the middle adolescents can practice and reinforce these skills in role play and different situations.
- ❖ Middle adolescents can be taught the skill to differentiate between passive, aggressive and assertive behaviour in various contexts that will allow them to practice self-efficacy and assertion through role play.

The Resilience Enhancement Kit focuses on developing learners' sense of self while also creating opportunities for self-assertion. The activities in the Resilience Enhancement Kit that can be developed to foster their sense of self could include the above mentioned ways by asking them to identify their personal characteristics that make them unique and visually illustrate them. Having class



discussion on why it is important to know themselves and to apply what they have learnt to a scenario that requires them to draw on their own strengths could also be utilized. The third part of the Resilience Enhancement Kit consists of the cognitive modalities of resilience.

### **5.2.3. Cognitive competencies**

#### **5.2.3.1. Meta-cognition**

Cognitive competence as a modality of resilience includes meta-cognition which comprises of a thinking style of effective problem solving and decisions making. Resiliency requires cognitive restructuring of how a middle adolescent thinks about stresses and adversities. Middle adolescents' who manage well under stress perceive themselves as capable and feels confident in making decisions to face adversities. Resilient middle adolescents view mistakes as opportunities to learn and grow, which can be described as a phoenix rising from the fiery ashes to become stronger and wiser. Resilient middle adolescents have the ability to reframe negative events to maintain a realistic and optimistic perspective on their lives.

Fry (1992:282) suggests the following ways in which teachers' initiatives can foster cognitive competence in the school context:

- ❖ Teachers should analyze their own thinking processes and classroom practices and adapt them;
- ❖ a teacher should be open-minded, encouraging middle adolescents to follow their own thinking (critical thinking and judgement);
- ❖ consistently provide opportunities for middle adolescents to select activities and assignments from a range of appropriate choices;
- ❖ using the vocabulary of creative and critical thinking;
- ❖ involving middle adolescents in role plays or simulations of events for example debates or discussions;

- ❖ being alert for and encouraging middle adolescents to notice where material presented in texts, films and other communications distort reality;
- ❖ having middle adolescents attempt to solve real life problems where there is the possibility of more than one adequate solution and where different types of information is required;
- ❖ requiring middle adolescents to defend their assertions with reasons;
- ❖ utilizing analysis and synthesis of different media content as found in television, radio, films, books and newspapers;
- ❖ encouraging middle adolescents to use analogies and metaphors in descriptions and comparisons as well as attempts to understand new concepts, ideas, principles or theories.
- ❖ allowing middle adolescents to think aloud and follow the steps in problem solving and decision-making.

Kordich-Hall and Pearson (2003:3) suggest the following ways in which resilience can be promoted through new thinking skills:

- ❖ *"Accurate and flexible thinking skills can be promoted by recognizing that our beliefs about adversity affect how we feel and consequently what we do;*
- ❖ *challenging our beliefs about why things happen uncovers our thinking style;*
- ❖ *we should develop an awareness of common thinking traps and errors;*
- ❖ *we should understand that our core beliefs about the world may be preventing us from taking opportunities and therefore alternatives should be considered;*
- ❖ *stresses and adversities should be placed in perspective while calming focusing on what should be done;*

- ❖ *explanatory style thinking habits are the shortcuts we reflexively take in order to quickly process things that happen to us that must be measured against reality."*

The National Association of School Psychologists (2001:4) also suggested finding positive meanings in everyday life to change the negative cycle of thoughts. The habitual style in which middle adolescents explain why unfavorable events happen to them can lead to a pessimistic attitude and negative beliefs about themselves and the people around them. This change in thinking style strives to cultivate a positive outlook on life. *"Holding spiritual or religious beliefs or otherwise appreciating the 'meaning of life' on philosophical levels can increase people's likelihood of finding positive meanings. It can occur through multiple pathways that include reframing adverse events in a positive light, infusing ordinary events with positive value and pursuing and attaining realistic goals" (Fredrickson, 2000:11).*

In the Resilience Enhancement Kit teacher modelling of resilient (accurate and flexible) or positive thinking styles and the deployment of effective problem solving and decision making skills enables the learner to adapt new ways of dealing with adversity. The Resilience Enhancement Kit can provide middle adolescents with the necessary skills to reframe their way of thinking and encourage them to utilize the competencies necessary to solve problems and make decisions. Such activities can include asking the middle adolescents to play a game that requires them to solve problems given in a creative way and to solve a mystery indicating what process was followed in the group to obtain the answer. The middle adolescents can also be asked to identify problems in the school context and indicate what resources they would use to solve the problems. Resilient middle adolescents rebound because they work towards future goals and plans.

### **5.2.3.2. Future expectations and goals**

The Resilience Enhancement Kit encompasses the necessity for learners to express their future expectations and goals. As mentioned earlier if the middle adolescent has future expectations and goals it serves as a motivator to rise above adversities and to persevere. During the middle adolescent phase, they begin to ask questions about what they want out of life as part of forming their own identity. Mountain (2000:4) suggested the following ways in which teachers or psychologists can encourage future goal setting:

- ❖ Listen to learners in order to learn about who they are and what they want out of life and discuss it with them.
- ❖ Model personal interest in goal getting by sharing some personal goals, risk taking, strategies, responses to setbacks, and celebrations of achievement.
- ❖ Build conversations about goals and goal getting with learners in groups and one-on-one.
- ❖ Provide clear, immediate, and constructive feedback to learners on a regular basis, and have learners practice giving one another the same kind of feed back.
- ❖ Integrate the concepts of goal getting into the curriculum content of all subjects.
- ❖ Organize lessons, assignments, and projects to build the basic skills of goal getting into the routine of classroom experiences.
- ❖ Use clearly defined rubrics, benchmarks, and performance standards to guide students to target clear, specific outcomes.
- ❖ Practice decision making and problem solving, as in dealing with setbacks and obstacles.

- ❖ Help learners see their knowledge and experience as resources.

Future expectations and goals can be fostered in the Resilience Enhancement Kit by involving learners in participating in projects where it is required of them to plan and set goals that need to be achieved. The middle adolescents could also be required to anticipate how their life would be like during different times in the future and discussing it in the group. The development of the Resilience Enhancement Kit will be discussed where the theory is put into practice.

### **5.3. The development of the Resilience Enhancement Kit**

The Resilience Enhancement Kit is developed to be utilized within the South African inclusive, Outcomes Based Education system. *"The learning outcomes are future-orientated, learner-centered, focuses on knowledge, skills, attitudes and values. The learner is facilitated towards the achievement of the outcomes and active participants in the learning process. The focus is on being able to use and apply learned knowledge, skills and attitudes rather than on merely absorbing specific or prescribed bodies of content. Each learner's needs are catered for by means of assessment tools and the learner's entry level in terms of foreknowledge and level of proficiency. The learners are guided to critical thinking, reasoning, reflection and action. The integration of knowledge is connected to real-life situations"* (Van Der Horst et al., 1997:13). As described in previous chapters, the theoretical framework underlying the development of the Resilience Enhancement Kit encompasses the social learning theory (learning within groups; observing others and modelling behaviours) and the cognitive behavioural theory (interplay between emotions, cognition and behaviour, reinforcement, positive self-statements, role-playing, self-management and self-evaluation). The health realisation theory (shaping real life experiences, creativity, strengths based resources, self-help); the ecological systems theory (drawing from interdependent life experiences, holistic development) and the positive psychology and asset-based perspective (drawing support from internal and external assets and strengths) also form part of the theoretical framework.

The Resilience Enhancement Kit focuses on the resilience modalities and content described in chapters 2-4 (emotional-, social-, cognitive competencies), keeping in mind that the resilience modalities lie on a continuum and are influenced by the interaction between the middle adolescent and their contexts. Resilience needs to be fostered throughout an middle adolescent's development and the Resilience Enhancement Kit was developed with the middle adolescent in mind but can be adapted and expanded to adhere to the developmental levels of learners. The outline of the Resilience Enhancement Kit is according to a didactic lesson format that makes it accessible and practical for teachers and psychologists to ascertain the learner's prior knowledge, provide guided exposition of new knowledge through self-directed models (mind maps) and facilitate the application of acquired skills and knowledge to real life situations.

#### **5.3.1. The content and duration**

The content for each session is divided according to the definition of a resilient middle adolescent that can be stated as follows: The resilient middle adolescent has a disposition, when faced with perceived diverse situations to ***identify, manage and utilize*** apposite personal modalities (capacities; competencies and strengths) and assets within their contexts to rebound in an optimal manner. The interaction between the middle adolescent and their contexts elicits sustained constructive outcomes that include continuous learning (growing and renewing), fulfilment of needs and flexibly negotiating the situation (***as reflected in the board game***).

The middle adolescent's school related behaviour is seen as a manifestation of the quality of the actualization of the middle adolescent's resilient modalities within the school context. Various methods of instruction are utilized to accommodate the learner's multiple intelligences and strengths for example role-playing, debating, music and game play. Each session is approximately an hour long. The duration of the sessions can be altered depending on the developmental level of the learners and their mastery of the content. The last

session consolidates the competencies learnt throughout the sessions and is presented in the form of a board game. The Resilience Enhancement Kit consists of the following:



- ♣ A manual outlining each session and the activities.
- ♣ Three Emotional resiliency mind maps (red), three Social resiliency mind maps (yellow) and two Mental / cognitive resiliency mind maps (green).
- ♣ A Definition of Resiliency mind map and a progress chart.
- ♣ Hand drawn facial expression cards. The intensity levels are indicated by pink (light /first degree), orange (medium/ second degree) and red (intense third degree).
- ♣ Cards: emotional vocabulary and positive and negative indicators.
- ♣ Idiom cards: "If life hands you lemons make lemonade".
- ♣ A Sand timer
- ♣ Two envelopes containing cards: "Play it save" and "Take a chance".
- ♣ Mystery puzzle clues.

### 5.3.2. Participants in the Resilience Enhancement Kit

The Resilience Enhancement Kit was used with 14-year old middle adolescents in grade 8. Due to the small learner population in a private school all the learners in the grade 8 group was chosen to participate. The Resilience Enhancement Kit can also be used for other learners from grades 6 and older, but is ideally suited

for middle-adolescents. The sessions can be administered with groups consisting of 4-6 learners.

### **5.3.3. Purpose of the Resilience Enhancement Kit**

The Resilience Enhancement Kit was created to enable Educational psychologists and teachers to appraise and enhance the modalities of resilience of the South African middle adolescent within the school context.

### **5.3.4. Procedures: Resiliency Scale (Likert-type questionnaire)**

The learners start with a Likert-type questionnaire to ascertain their level of resiliency. The teachers can also measure his / her understanding of the level of resiliency of each learner in their class to gain insight into anticipated and realistic level of support the learners need. The question categories are composed of the essential competencies that constitute resilience related to the emotional competencies (questions 1-30 for learners scale and 1-15 for teacher's scale), social competencies (questions 31-55 for learner's scale and 16-28 for teacher's scale) and cognitive competencies (questions 56-75 for learner's scale and 29-40 for teacher's scale). The following resiliency questionnaires were drawn upon as a guidelines: "The middle adolescent Protective factors index" developed by Springer and Phillips (1997), "Resiliency and mental health questionnaire" by Skehill (2001) and "Health kids Resilience assessment" by Constantine, Benard and Diaz (1999). The questionnaire is designed with a four-point scale in order to prevent the learners from choosing and rating a mid-section that could result in an inaccurate view of the learner's level of resilience.

#### **5.3.4.1. Data collection**

Great care was taken to avoid overlapping questions in the questionnaire and to ensure that the degree of language difficulty is appropriate for the learners by asking five learners from grades 9 to 10 (3 boys and 2 girls) to critically look at the questionnaire. These five learners were asked semi-structured questions regarding the lucidity of the format of the scale; the difficulty of language; the time



it took to complete the scale and any other aspects they felt could contribute to a middle adolescent's resiliency. They were asked how they felt about their own resiliency as well as if they gained any insight from completing the questionnaire. Adaptations were made to the questionnaire based on the above-mentioned information. Observations of the group revealed that one of the boys tried to alter his answers based on the evaluation scale and therefore the evaluation scale was not included in the multi-cultural sample group.

Five teachers that teach the grade 8 learners were asked to identify a learner whom they felt exhibited resilient or less resilient behaviour. Two different teachers were asked to look at the Resilience Scale and comment on any changes or additions they might want to bring to the teachers questionnaire. The two teachers however did not consider it necessary to make any changes. The teachers participating in the research were also multi-cultural consisting of one Black male teacher, one Indian female teacher, one White male teacher with a lot of teaching experience, one White female teacher with a lot of teaching experience and one Coloured female teacher. The division of the questionnaires into the different competencies of the resilience modalities enables the facilitator to ascertain which competencies the middle adolescent needs to develop further and which is the areas of strengths.

Hunter and Chandler (1999:5) emphasized that the middle adolescent's level of resilience varies with each developmental phase and can vary on a continuum of less optimum resilience to optimum resilience based on the middle adolescent's developed competencies. The interpretation scores of the resilience questionnaires are an amalgamation of the four level descriptor codes the Outcomes Based Education and has some similarities with the level descriptors of Skehill's (2001:2) "Resiliency and mental health questionnaire". The level descriptors indicated by Skehill (2001:2) can be outlined as follows:

|        |  |
|--------|--|
| 75-100 | Very resilient                                 |
| 50-74  | Average in resiliency                          |
| 25-49  | Need some booster shots to increase resiliency |
| 0-24   | At risk-heavy immunization required            |

The questionnaire for the teachers and learners can be obtained by contacting L. Kruger on the e-mail address: [lifchoice2@absamail.co.za](mailto:lifchoice2@absamail.co.za)

### **5.3.5 Design and content of the Resilience Enhancement Kit**

The Resilience Enhancement Kit sessions are divided into a first contact session where the principles of co-operative group work are discussed as well as clarifying the concept of Resilience. A computer drawn logo is used throughout the Resilience Enhancement Kit which represents a young adolescent who is rebounding (illustrated by running up steps or bungee jumping) against changes, adversities and risks.

The sessions are divided into the emotional-, social- and cognitive resilience competencies. The various competencies are colour coded according to the colours of a traffic light in order to assist the learners in associating and remembering the aspects of each competency. Seeing these colours in everyday life might also act as a reminder to the learners to reinforce and practice the principles they have learnt. Emotional resilience is represented by red, social resilience is represented by yellow and cognitive competence is represented by green.

Mind maps are used to instruct the learners regarding the competencies necessary to manage their resilience modalities. Geometrical forms represent the outline of the mind maps to aid in the retrieval of the information to manage the resiliency competencies from memory. The emotional competencies are represented by triangles, the social competencies by circles and the cognitive competencies by squares. The emotion cards divided into three colours (red, orange and pink) that represent the intensity of the emotion while the expression on the faces reveals the emotion.

The face was created by using circles and then taking out the unnecessary lines and adding hair. The facial expressions of the cards were hand drawn. The emotional vocabulary is divided according to the intensity levels of emotions as well as the positive or negative meaning attribution. The format of the sessions' activities was designed with the interest of middle adolescents in mind so that they would engage and participate fully in the activities.

The final session consist of playing the board game. The game is developed with the aim of giving the learners an opportunity to apply and consolidate the competencies learnt in the sessions, which consist of the emotional-, social- and cognitive modalities of resilience, to real life situations by means of a fun and non-threatening method. The game employs group participation as well as the enhancement of the middle adolescents' self-concept through positive reinforcement (tokens). The desire to play is a natural part of developing and gaining new knowledge and skills. *"Game playing has been traced back to prehistoric times and is thought to play a significant role in adaptation to the environment. Games invoke behaviour that is more goal-directed and carries a greater sense of seriousness than merely playing. Games have played a significant role in the child's understanding and acceptance of societal rules. The rules and structural components of games provide a natural medium for children to learn how to be civilized and well adjusted. Games can bring the most difficult and painful subjects to the surface and can be discussed in a non-threatening and supportive atmosphere. Using a game approach can effectively help children learn new behaviours, become better problem solvers, and gain insight into their difficulties"* (Schaefer & Reid, 2001: vi-viii). The board game does not place an emphasis on skill, competition or strategy but rather focuses on cooperation and reward self-expression and application of learnt competencies. Bow and Quinnell (2001:131) refer to the following aspects that can be inferred from game play:

- ∞ Cognitive strategies;
- ∞ response to feedback;

- œ drive for mastery, reflects the child's degree of investment, persistence and desire to accomplish;
- œ sense of competency which leads to self-confidence;
- œ self-control over drives and impulses;
- œ improved attention span;
- œ frustration tolerance;
- œ competitive drive;
- œ willingness to follow rules;
- œ ability to deal with pressure;
- œ reaction to success and failure;
- œ locus of control.

Streng (2001:179) refers to the following therapeutic qualities that game play enhances that can be areas for Educational psychologists to observe:

- œ Developing interpersonal relationships;
- œ practicing verbal and non-verbal communication;
- œ assertiveness;
- œ practicing adaptive behavioural responses in peer groups;
- œ facilitating discussion of emotional and behavioural responses;
- œ clarifying adaptive and maladaptive belief systems;
- œ understanding group processes and facilitating group membership;
- œ enabling skill acquisition via a medium with which the learner is familiar;
- œ encouraging the generalization of newly acquired skills;
- œ encouraging the accommodation and assimilation of life experiences;
- œ using similar peers as models;
- œ learning new ways to cope.

5.3.5.1. *The complete game layout*



The board is in the form of a spring or pyramid that represents reaching the fulfilment of needs by using competencies of the resilience modalities to bounce back (rebound). The victory pedestal is a combination of a pedestal and laurel wreath typically found at the Olympic Games. This was chosen to convey the message that every middle adolescent is a winner and has strengths that enable them to bounce back effectively. The interior of the victory pedestal has a "thumbs up" image to reinforce the sense of accomplishment. The starting disk image gives the impression that this is the departure point to "start bouncing back" while the logo representing an adolescent shows the message on his T-shirt that he is a winner. The colours of the placeholders and the question cards correspond to the colours of the Resilience Enhancement Kit: red for emotional resilience, yellow for social resilience and green for cognitive resilience (traffic light) to assist in the retrieval of information from memory. The tokens are positive remarks and do not contain words that might seem to be positive but has a negative connotation for example the word "unbelievable" which implies that the person cannot believe that the other person could achieve this particular

competency. There are a 120 positive remark tokens and the image of the token reflect a facial expression conveying acclaim.

The way the moving pieces were developed aimed to reflect an African sense. The playing pieces are representative of the learners playing with them and they can bounce back. The spinner indicates the order of participation by corresponding with the coloured beads on the playing pieces. The images illustrate what the learners should do for example gain a token (face), pick a card (hand) or move a space (foot). The complete Resilience Enhancement Kit can be obtained by contacting L. Kruger at the e-mail address: [lifchoice2@absamail.co.za](mailto:lifchoice2@absamail.co.za)

The Educational psychologist uses games to engage learners in the therapeutic process because they are familiar activities and a natural medium of expression. Games create an informal atmosphere and assist in establishing the interpersonal interaction between psychologist and learner, which alleviates initial discomfort and anxiety. Games can be used diagnostically and in the promotion of therapeutic growth as seen in the Resilience Enhancement Kit. Games provide learners with the opportunity to practice adaptive behaviour in various roles. The game can therefore be used on its own as an assessment and therapeutic tool.

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| <p>CHAPTER 6</p> <p>Empirical Research</p> <p>Design</p> |
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*"In the evolution of educational ideas and practices, research goes on with expanding energy and breadth of field to attest to the conviction that problems to do with learning and growing up need not be seen as intractable obstacles but can be overcome"*  
*(Freebody, 2003:218).*

### **6.1. Introduction**

Psychologists, teachers, and schools play an important role in providing protective measures and assets to middle adolescents who need to develop and maintain their resilience for coping with stressful life events. The South African school system must create a safe, positive and achievement-oriented context where middle adolescents develop a sense of purpose and promote connectedness with significant others. Schools can also teach valuable life skills and competencies which will empower middle adolescents to rebound against adversity. Furthermore, schools can ensure that every learner develops the foundation competencies needed for further learning and the development of a positive self esteem. Therefore the role of the school is vitally important in enhancing resilience modalities by promoting emotional, social and cognitive competencies, identifying assets to be utilized and attending to the middle adolescent needs. Freebody (2003:11) refers to Hunter who suggests the following general functions that schooling executes:

- ❖ *"a pastoral function, that children are given caring and humane environments in school in which to grow and develop;*

- ❖ *a skilling function, that schools have a significant role in the production of a skilled and competent workforce;*
- ❖ *a regulative function, that schools transmit forms of orderliness and control;*
- ❖ *a human-capital function, that the investment of effort and money in schools directly enhances economic productivity;*
- ❖ *a function of middle adolescent expression, that schooling provides the context in which middle adolescents can learn to explore, develop and express their personal goals and aspirations;*
- ❖ *a cultural-heritage function, that young people are introduced to the ways of thinking and acting that have been valued over time;*
- ❖ *a political function, that schools produce a citizenry dedicated to the preferred political principles of the society. "*

Considering all the functions that Hunter describes that a school executes it becomes apparent that the development of modalities that foster resilient functioning is lacking. If the significant role players in the school context want to develop middle adolescents holistically to become optimally functioning citizens of society they should address the emotional, social and cognitive modalities of middle adolescents. This research is essential to empower the role players in the school context (teachers and psychologists) to appraise, enhance and develop the resilience modalities necessary for resilient functioning. Research undertaken by the helping professions, in particular Educational Psychology, must focus on empowering the stakeholders in the school context to assist, develop, execute and utilize resources for the teaching and development of middle adolescents by rendering their services as a developer and consultant. The need identified by this researcher working within the school context is to equip learners to be able to rebound against the stressors and challenges of life as well as being able to adapt with the continuous changes of society.



The aim of this research is to describe and explore the process of how to appraise (Resiliency Scale), develop and enhance (Resilience Enhancement Kit) the modalities of resilience within the school context that can be used by psychologists and teachers. The nature of the research problem and aim guide the choice of research methodology for this research and the understanding of the concepts through the literature review.

## **6.2. Literature review**

The research of literature is an integral part of the research process and forms the pivot around which the research is consolidated and integrated. The literature review forms the deductive frame of reference of the investigation. "*The literature review summarizes and analyzes previous research and shows how the present research is related to this research. It is selective and the present research contributes to existing knowledge*" (McMillan et al., 1997:55). The purpose of this research's literature review is to demarcate theoretical concepts that form the basis for the concept clarification and operation of variables in the Resiliency Scale (Likert-type questionnaire) to appraise the middle adolescents' level of resiliency as well as the theoretical basis for the modalities of resilience of the Resilience Enhancement Kit. The literature review is also an amalgamation of the available information regarding the competencies of the resilience modalities of the middle adolescent, which is often only investigated as isolated components. The information gathered for the literature review was extracted from books, articles in journals, periodicals and scientific electronic information from the Internet. The literature review informs on the selection of research methods for studying the resilience modalities.

## **6.3. Methodology of the research**

The methodology refers to the way in which the researcher comes to know what is known about the phenomenon. "*The methodological design often evolves*

*during the research; interpretive analysis is applied to narrative data; meanings are sought in specific social/ cultural contexts with the possibility of theoretical generalization and research strategies aim to uncover relations among phenomena, inductively discovering theory out of categories that emerge from research" (Eric Clearinghouse, 2004:2).* This research is conducted from a combined qualitative- and quantitative approach.

These two approaches are seen as complementary to each other within a model described by Creswell (1994:173) as a dominant-less-dominant model. The research will mainly be grounded in the qualitative approach but quantitative information will be collected from the statistical analysis of the sample group's responses. *"We are happy to combine qualitative and quantitative methods in the same research where this is viewed as necessary and helpful in answering the research questions posed. We acknowledge that qualitative and quantitative data do not calibrate exactly, but see this as a manifestation of the different ways in which each method contributes to an understanding of the research question. Our search is for complementary extension that is using different forms of evidence to build greater understanding and insight of the social world than is possible from one approach alone" (Snape & Spencer, 2003:23).* Both the qualitative and quantitative approaches to this research will be discussed and how it was utilized.

### **6.3.1. Qualitative research**

The qualitative approach seeks illumination, understanding and extrapolation of similar situations to understand phenomena in context-specific settings. A dominant qualitative approach gives the researcher leeway to explore the intricate aspects of meaning attribution. In this research, it relates to the ways in which the middle adolescents' resilience modalities can be enhanced and developed as well as gaining insight into what middle adolescents perceive as influencing their level of resilience that cannot always be measured by a quantitative approach. Snape and Spencer (2003:3) quote Denzin and Lincoln's

definition of qualitative research as *"a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that makes the world visible. Qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers research things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them."* The inductive qualitative approach uses the natural context as the source of information and in this research it is the middle adolescent in his or her school context.

The interpretive aims will be to ascertain how the middle adolescents make sense of their life world and what meanings they attribute to their experiences and how they utilize their resilience modalities to rebound against life's adversities. The information gained from the middle adolescents will be interpreted according to the middle adolescents' context and developmental phase as well as the theories underlying Educational Psychology's view on resilience as discussed in the previous chapters. Qualitative research pays attention to the idiosyncratic distinctiveness of each participant's context. *"Qualitative research is well suited for the purposes of description, interpretation and explanation and the reason for choosing a qualitative methodology revolves primarily around the type of question or problem to be explored. Questions that begin with how or what lend themselves to qualitative research whereas why questions are more appropriately approached from a quantitative perspective. The how or what questions generally arises because little is known about the problem, the theory is underdeveloped and cannot explain a phenomenon accurately or used to gain new insights into problems about which information already exist"* (Eric Clearinghouse, 2004:3).

In this research, the question posed relates to how the resilience modalities of the middle adolescent can be enhanced. The Resilience Enhancement Kit requires the middle adolescents to draw upon their socially constructed prior knowledge to participate in activities as well as working within culturally diverse groups. Snape and Spencer (2003:4) describe the perspective of the researcher and the researched as *"an 'emic' perspective, i.e. the perspective of the people*

*being studied by penetrating their frames of meaning, viewing social life in terms of processes, providing a holistic perspective within explained contexts and sustaining empathic neutrality whereby the researcher uses personal insight while taking a non-judgemental stance."*

Educational psychologists and teachers can maintain a non-judgemental stance by interpreting the thoughts, feelings and behaviour exhibited by the middle adolescent from their frame of reference and phase of development as well as keeping their cultural context in mind. The research of the phenomenon of resilience and the enhancement thereof within the school context requires the middle adolescent to apply self-reflective strategies, internalize attitudes, knowledge, understanding, values and skills, which are context specific. The observation of the application of these above competencies in real life contexts by the researcher supports the choice of a qualitative approach. *"Qualitative research is based on a naturalistic-phenomenological philosophy that views reality as multilayered, interactive and shared social experience interpreted by individuals (McMillan et al., 1997:392).*

The qualitative approach requires the researcher to observe, describe and interpret settings and phenomena as they are, but also functioning as the instrument for collecting information. In this research, the collection of information will be by means of observations and an open-ended question posed to the participants, which will be discussed further in this chapter. My role as researcher in this study will be that of participant-observer where there was interaction with the participants in order to administer the Resilience Enhancement Kit and Resiliency Scale as well as observing and making field notes regarding the participant's responses.

This research focus on case studies using an ethnographic methodology. *"Ethnography is analytical descriptions of social scenes, individuals and groups that recreate their shared feelings, beliefs, practices and actions to make sense thereof. Reality is believed to be a social construct that individuals or groups*

*derive or ascribe meanings to specific entities such as events and persons"* (McMillan et al., 1997:427). The case study design focuses on the analysis of a phenomenon that needs to be understood in depth and in the research it is the resilience modalities of the middle adolescent. Freebody (2003:81) is of opinion that the goal of a case study is to put in place an inquiry in which both researchers and educators can reflect upon particular educational practice and in this research, it refers to the ways in which resilience modalities can be fostered and appraised in the school context, specifically an inner-city high school. Lewis (2003:76) reinforces the idea that studying a phenomenon such as resilience through case studies aids in understanding the concept because the middle adolescents' perspectives that are rooted in a specific context can be ascertained.

Participating in the activities of the Resilience Enhancement Kit within the school context requires the middle adolescents to reflect and evaluate their perception and understanding of their resilience modalities as well as give verbatim accounts of what influences their levels of resilience (open-ended question) and so more insight into the phenomenon of resilience can be gained. The dominant qualitative approach is used to determine what emotional-, social- and cognitive modalities constitute resilient functioning as well as what content and activities could be used in the Resilience Enhancement Kit to effectively enhance the middle adolescent's resilience competencies. The qualitative paradigm in this research functions in unison with the quantitative paradigm.

### **6.3.2. Quantitative research**

McMillan and Schumacher (1997:16-17) propose that the quantitative approach uses a deductive form of reasoning, which implies that a researcher uses existing theoretical knowledge as a conceptual frame of reference and collects empirical information from a sample of the larger population to draw conclusions and generalizations. The aim therefore of the quantitative approach is to measure the social world objectively through scientific explanation. In this research, the

quantitative approach will be utilized when the middle adolescents' level of resilience modalities incorporating the emotional-, social- and cognitive competencies will be appraised through the development and administration of the Resiliency Scale (Likert-type questionnaire). Through the literature review, it became apparent that there is a need for a questionnaire to appraise the modalities necessary for resilient functioning that can be used for the South African context. The available questionnaires that measure resilience is sparse and the ones available are limited in their scope and normed for the American population. A study of the relevant literature regarding resilience modalities enabled the identification of the competencies necessary for resilient functioning. This was used as a framework to structure the questions so that the middle adolescent could indicate their level of resilience.

#### **6.4. The sample**

The education system in South Africa is divided between public-, private- and home schooling. The schools can further be divided into categories referred to as inner city schools, rural schools and farm schools. There are also schools for learners with special educational needs (e.g. the blind, deaf, autistic and disabled). In South Africa, the learners experience a transition from primary school to high school at the age of 13-14 years, which is reflective of the middle adolescent phase. This transitional between schools is characterised by a stressful time of adapting to a new environment for the middle adolescents. The site selection criterion is dependent on the aim of the research. A private inner-city school in Johannesburg was chosen for this research. The school is chosen for its diverse multi-cultural composition even before 1994 when South Africa obtained a democracy where all cultures received equal rights especially related to receiving the same level of education and where all the cultures could attend the same schools. The heterogeneous school has been in existence for 40 years and has a full matric pass-rate despite adversities experienced by the middle

adolescents living in a city. The school follows the curriculum structured by the Department of Education.

This research makes use of a purposeful sampling as the dominant strategy in this qualitative research because it seeks information rich cases, which can be studied in depth. *"Heterogeneous samples or maximum variation sampling is a deliberate strategy to include phenomena which vary widely from each other. The aim is to identify central themes which cut across the variety of cases or people"* (Ritchie, Lewis & Elam, 2003:79). A heterogeneous and multi-cultural sample was chosen that could be representative of the South African middle adolescent population living in the inner-city school context. Due to the smaller numbers of middle adolescents in a private school the whole grade 8 group (n=30) was selected and could therefore not only be considered a purposeful sampling but also a comprehensive sampling due to the manageability of the size and heterogeneous composition of the participants.

#### **6.4.1. The target population**

The target population for this research will be made up of 14-year-old middle adolescents in an inner-city private school located in Johannesburg. The total number of middle adolescents (n=30) in grade 8 will be assessed for their levels of resilience. Due to the varying continuum of resilient functioning in the different modalities, all the middle adolescents were included to either develop or enhance their resilience modalities. There were sixteen boys and nine girls who participated in the Resiliency Scale and the Resilience Enhancement Kit. Unfortunately, four boys and one girl could not complete the post-test phase due to absenteeism and therefore only 25 participants completed the two test phases and the Resilience Enhancement Kit. The culture composition of the participants in this research was nine Black middle adolescents (6 boys and 3 girls), nine White middle adolescents (6 boys and 3 girls), four Coloured middle adolescents (1 boy and 3 girls) and three Indian boys. The Resilience Enhancement Kit will be administered to these learners to enhance and develop their resilience

modalities. The Resilience Enhancement Kit as well as the appraisal instrument has its foundations in the literature research as discussed in chapter five.

## **6.5. Selection of data collecting.**

The selection of data collecting strategies comprise of qualitative research techniques such as an open-ended question, observations and the Resilience Enhancement Kit as well as a combination of qualitative and quantitative technique namely the Resiliency Scale (Likert-type questionnaire).

### **6.5.1. Open-ended question.**

The open-ended question is a technique in which a question is posed to obtain a participant's narration. The aim of the qualitative open-ended question was to supplement the Resiliency Scale regarding what the middle adolescent feel contributed to their level of resilience (the question is given in chapter one). Due to the large number of participants as well as making the participants feel that the information given is confidential, they were asked to give their answers in written form. This technique was also utilized to establish a relationship of trust between the researcher and the participants to ensure their involvement in the Resilience Enhancement Kit. The answers from the open-ended question conducted with the middle adolescents was used to add determinants of resilience to the Resiliency Scale and gain insight into how middle adolescents bounce back against adversity.

### **6.5.2. Observations**

Observations are used to provide a holistic perspective of the middle adolescent within the school context. *"Participant observation is when the researcher joins the constituents' research population or is organisational in a community setting to record actions, interactions or events that occur. This method is integral to anthropological and ethnographic research because it provides direct experiential*



*and observational access to the insider's world of meaning" (Ritchie, 2003:35).* The researcher administers the Resilience Enhancement Kit with the class teacher, and is therefore in a favourable situation to observe the middle adolescents' interaction with the presented material. Observing the middle adolescents provides the opportunity for the researcher to ascertain how they respond emotionally and behaviourally to the Resilience Enhancement Kit and whether the activities are successful or need to be altered to make the Resilience Enhancement Kit more effective.

### **6.5.3. Resilience Enhancement Kit**

The Resilience Enhancement Kit is structured according to a didactic lesson that makes it accessible and practical for teachers and psychologists to ascertain the middle adolescents' prior knowledge, provide guided exposition of new knowledge through self-directed models (mind maps) and facilitate the application of acquired competencies to real life situations. The content for each session (as described in chapter 5) of the Resilience Enhancement Kit is divided according to the definition of a resilient middle adolescent with the aim to identify, manage and utilize apposite personal modalities (capacities; competencies and strengths) and assets within their contexts. Various methods of instruction and activities are utilized to accommodate the learner's multiple intelligences and strengths for example role-playing, debating, questionnaires, dramatization, character studies, self-reflection, interviews, group work, music and game play.

There are 12 sessions and each session is approximately an hour long. Two sessions are utilized for the pre-test and post-test phases where the middle adolescents have to complete the Resiliency Scale. A session is used to familiarize the middle adolescents with the concepts as well as establishing the regulations for participating in the Resilience Enhancement Kit. The sessions are further divided into ***emotional competencies*** that comprise of identification, management and expression of emotions, empathy and ego-resiliency. The

**social competencies** comprise of positive relationships (establishing friendships and working in groups) and a sense of self. The **cognitive competencies** consist of meta-cognition (problem solving, decision making and reframing of thoughts) as well as future expectations and goals. A session is utilized to consolidate the competencies gained throughout the sessions and is presented in the form of a board game. The design of the Resilience Enhancement Kit is discussed in detail in chapter 5. The researcher is actively involved in administering the activities and observing the middle adolescents during the Resilience Enhancement Kit sessions and during the test phases of the Resiliency Scale.

#### **6.5.4. Resiliency Scale**

Hitchcock and Porter (2003:1) are of opinion that a Likert scaling is a method of assigning numbers to a statement or assertion in order to measure a middle adolescent's attitudes or beliefs. Scaling are the Participant's ratings (e.g. 1-4) that reflect the strength of the attitude or belief for any particular item. The ratings for different questions can be added together in order to obtain a summated indicator of the middle adolescents' standing regarding the attitude or belief being measured. The following limitations can be applicable to the Likert scale and the researcher must be vigilant to avoid or prevent these problems by providing a thorough explanation of what is required from the participants. The limitations could include:

- ❖ Answers that might not reflect what the middle adolescent truly thinks and feels because participants can answer according to how they anticipate they should react. The researcher was aware whilst interpreting the results that the middle adolescents' answers could have been influenced by expectations and a wish to please.
- ❖ Some participants might also answer in a response pattern without considering the questions carefully. Therefore, the scales should be developed (for example 1-4) to limit the choice of a mid-section.

The Resilience Scale is designed with a four-point scale in order to prevent the middle adolescents from choosing and rating a mid-section.

- ❖ Care must be taken to avoid ambiguous questions. This concern was addressed by asking the two teachers and five adolescents to look critically at the questionnaire. Furthermore, a psychologist familiar with the resilience also scrutinized the Resiliency Scale.

Two Resiliency Scales were developed to measure resilience modalities, one for the middle adolescent and one that serve as a teacher's or psychologist's guide regarding their perception of the middle adolescents' resilient functioning. The aim of the Resiliency Scale is to determine in the pre-test phase what the middle adolescents regard as their level of resilience as well as the teacher's perception of their learners. Furthermore, it is used in the post-test phase to evaluate what effect the Resilience Enhancement Kit had on the perception of the middle adolescent regarding their level of resilience. The results from the Resiliency Scale can also inform on the competencies in the various modalities of resilience that require more attention to develop and enhance. The Resiliency Scale is divided into emotional-, social and cognitive competence, which forms part of the resilience modalities. The **emotional competencies** are subdivided into questions related to empathy, identification, management and communication of emotions as well as ego-control. The **social competencies** are subdivided into questions related to healthy positive relationships, autonomy and sense of self (self-identity; self-efficacy; self-perception). The **cognitive competencies** are subdivided into questions related to meta-cognition (problem solving, decision-making and planning) and future expectations (purpose, goals and aspirations).

Great care was taken to avoid overlapping questions in the questionnaire and to ensure that the degree of language difficulty is appropriate for the learners by asking five learners from grades 9 to 10 (3 boys and 2 girls) to critically look at the questionnaire. Two teachers (other than the 5 participating teachers) that teach grade 8 learners were asked to critically look at the teacher's Resiliency

scale and make any suggestions for modification. These five learners and the two teachers were asked semi-structured questions regarding the lucidity of the format of the scale; the difficulty of language and the time it took to complete the scale. The two teachers did not feel that there were any changes necessary. Feedback from the five learners resulted in simplifying the language of three of the sentences and adding a question regarding being able to create physical safety in an adverse situation. The attempt to manipulate answers based on the interpretation table by one of the grade 9 learners resulted in omitting it during the testing phases with the grade 8 group. The correlating questions (for example 2 and 39; 27 and 60; 29 and 64) and phrasing of questions (stating questions in the negative for example question 21; 26; 40) in the Resiliency scale also served as an internal reliability and validity. The analysis of the observations and middle adolescents' views on what makes them resilient will be discussed in the interpretation and discussion of results.

## **6.6. Data analysis**

The methods of data generation as discussed above as well as the analysis thereof must be flexible, adaptable and sensitive to the social contexts of the participants. *"A basic interpretive research is used when the goal of the researcher is to understand how participants make meaning of a situation or a phenomenon. The researcher serves as a filter for the meaning, using inductive strategies with a descriptive outcome"* (Eric Clearinghouse, 2004:4). The qualitative data in this research comes from field notes (observations) made during the administration of the Resilience Enhancement Kit, which are already filtered according to the focus of the research and the open-ended question to participants regarding what they perceive as having an influence on their resilient functioning. Qualitative data analysis is primarily an inductive process of organizing the data. This form of data analysis requires labelling, sorting and synthesising of the data obtained to be able to interpret the themes that are presented in the data within the framework of the middle adolescents' developmental phase. *"Inductive analysis means that categories and patterns*

*emerge from the data rather than being imposed on data prior to data collection"* (McMillan, 1997:501).

An overview of the data in this research was first gained to familiarize with the content that related to the written responses of the open-ended question and the observations made whilst keeping the aim of the research in mind (appraisal and enhancement of the emotional-, social- and cognitive resilience modalities in middle adolescents). The data was attended to reflectively to identify main and sub themes based on the middle adolescents' behaviour, attitudes and views regarding their resilient functioning. The data in this research was then segmented and ordered into categories of meaning in a column form and then compared for similarities and distinctions to discover patterns. *"In qualitative analysis the analyst tries to build an explanation based on the way in which different meanings and understandings within a situation come together to influence the outcome. It is our view that qualitative explanations attempt to say why patterns and outcomes in the data have occurred"* (Ritchie, Spencer & O'Conner, 2003:219). The synthesis of themes or concepts is conveyed in written form in this research. The meaning middle adolescents attribute to their understanding and application of their resilience modalities should be viewed within the framework of their developmental phase. The data gathering and analysis of this research was guided by the ethical considerations discussed hereafter.

## **6.7. Ethical considerations**

The ethical guidelines serve as standards to which a researcher must adhere to in order to ensure that his or her research is of high standards. The research conducted will be measured according to reliability, validity, suitability, objectivity and ethical acceptability.

### **6.7.1. The researcher**

The ethical responsibility towards the participants in the research is of vital importance for the credibility of the research findings. The researcher must therefore continuously apply self-reflective strategies by making sure that the aim of the sessions in the Resilience Enhancement Kit were adhered to, analysing the responses noted and behaviour observed to see whether any changes need to be made in the Resilience Enhancement Kit. The researcher should strive to uphold objectivity and as far as possible be value-free.

### **6.7.2. Ethical acceptability regarding participants**

The participants will be treated with respect, acceptance and understanding, and will in no way be harmed by participating in this research. *"As in any research, sample member's informed consent to participate must be obtained. This means providing them with information about the purpose of the research, who the research team is, how the data will be used, and what participation will require of them"* (Lewis, 2003:66). The Participant's prior permission is obtained before the Resilience Enhancement Kit was administered and anonymity and confidentiality was made clear to participants. This includes consent from the middle adolescents themselves as well as their parents (see annexure A). The informed consent implies that information regarding the aim of the research; the procedures, which will be followed during the research as well as the responsibilities of the participants is highlighted. The consent is documented verbally and in writing. The confidentiality and anonymity of the information gathered will be upheld. After each session is completed, the participant's questions will be answered and misconceptions cleared. The research instruments should adhere to the ethical standards for research.

### **6.7.3. Ethical features regarding research instruments**

Research procedures and instruments used in this research will adhere to ethical features, which contributes to the credibility of the research. This implies that the research instruments (Resiliency Scale and Resilience Enhancement Kit) must be reliable, valid, suitable, objective as well as feasible.

#### **6.7.3.1. Reliability**

*"Reliability is generally understood to concern the replicability of research findings and whether or not they would be repeated if another research, using the same or similar methods was undertaken"* (Lewis & Ritchie, 2003:270). The inter-rater reliability of this research will be achieved by means of triangulation. A registered psychologist familiar with the concept scrutinized the Resiliency Scales as well as the Resilience Enhancement Kit. The Resiliency Scales are also administered at the beginning of the sessions (pre-test phase) as well as at the end of the final session (post test phase) to:

- a) ascertain if there are any correlation in the answers (scale 1-4) given by the middle adolescent in during the pre-test phase and post-test phase;
- b) ascertain if there was any change in the middle adolescents' perception regarding their competencies that foster resilience after participating in the Resilience Enhancement Kit.

Ritchie (2003:40) proposes that qualitative and quantitative research methods can be combined as part of a preceding statistical enquiry especially when *"a battery of items is to be compiled to measure attitudes or behaviours"* or as part of triangulation to *"check the integrity of or extend inferences drawn from the data."* Part of this research's idiographic approach implies that many sources of information is used in this research which includes an open-ended question, behavioural observations and evaluative questionnaires which adds to the validity and reliability of the research results.

### 6.7.3.2. Validity

"Validity refers to the correctness or precision of a research reading. It has two distinct dimensions, the first known as internal validity, is concerned with whether you are investigating what you claim to be investigating and the second, termed external validity is concerned with the extent to which the abstract constructs or postulates generated, refined or tested are applicable to other groups within the population or to other contexts or settings" (Lewis et al., 2003:273). There are strategies to enhance validity of research and the following strategies as described by McMillan and Schumacher (1997:405) applies to this research:

- ❖ Verbatim accounts of the participants through the open-ended question regarding what influences their level of resilience; Resiliency Scale (Likert-type questionnaire) and open-ended evaluation questionnaire (presented in chapter 5) at the end of each session to give the middle adolescents the opportunity to reflect on what they have learnt and how they think they can apply it to their everyday life ;
- ❖ checking informally with participants to make sure the meanings of what they said or did during the activities which was observed was understood correctly by the researcher;
- ❖ agreement of data findings from a psychologist familiar with the research topic;
- ❖ information obtained through observation and field notes. "*Low-inference descriptors are concrete, precise descriptions from field notes and interview elaborations. The descriptions are almost literal and any important terms are those used and understood by the participants*" (McMillan et al., 1997:46).

### 6.7.3.3. Suitability

The suitability of the research implies that the instruments used must be suitable to ascertain and enhance resilience modalities. As discussed earlier, the compilation of the components included in the Resiliency Scales as well as the



Resilience Enhancement Kit was obtained through the information gained through the literature review. The format of the sessions of the Resilience Enhancement Kit is structured so that the teacher can easily incorporate it into the curriculum to be used in the school context with the middle adolescents.

#### **6.7.3.4. Objectivity**

*"Objectivity is both a procedure and a characteristic. Objectivity means unbiased, open-minded, and not subjective. As a procedure, objectivity refers to data collection and analysis procedures from which only one meaning or interpretation can be made"* (McMillan et al., 1997:10). In this research, objectivity will be upheld by focusing on the participant's direct thoughts and feelings by means of the open-ended question that is written down, Resiliency Scale and discussions in the sessions to minimize faulty interpretation of the information. *"Objectivity in qualitative research refers to the dependability and confirmability of the researcher's interactive style, data recording, data analysis and interpretation of participant meanings"* (McMillan, 1997:408). To ensure the objectivity of the research a clear statement of the research objectives and a description of the approaches and methods used in conducting the research are given. The data has also been subjected to review by a registered psychologist familiar with resilience. The research states what the process and instruments (Resiliency scale and Resilience Enhancement Kit) were of enhancing and appraising resilience modalities so that the research could be reproduced by other researchers in further studies.

#### **6.7.3.5. Feasibility**

McMillan and Schumacher (1997:545) describe feasibility as a standard to ensure that an evaluation or process is realistic and consist of practical procedures that are viable and cost effective. The Resilience Enhancement Kit is developed to be feasible for teachers and psychologists to use with groups in the school context. The activities in the Resilience Enhancement Kit are easily

reproducible and utilize the assets available in the environment so that communities with a lower economic status can still utilize it effectively.

## **6.8. EMPIRICAL INVESTIGATION AND CONCLUSIONS**

### **6.8.1. Interpretation and discussion of the research results**

The research conducted with the 14-year old middle adolescents in a Johannesburg inner-city school will be presented as follows:

- ❖ A summary of the sessions is presented that include the middle adolescents' evaluations of the Resilience Enhancement Kit.
- ❖ An integrated table and discussion on the comparison regarding the middle adolescent items of the pre- and post-test phases of each learner.
- ❖ Graphs (girls and boys) illustrating the results from the pre- and post test results and discussion thereof obtained from the Resiliency Scale for learners.
- ❖ Graphs (girls and boys) illustrating the difference in the resilience modalities from the pre- and post test phases.
- ❖ A graph illustrating the results from the teacher's results obtained from the Resiliency Scale for teachers compared to that of the learners' views on their level of resilience as well as a discussion thereof.

### **6.8.2. Qualitative summary of the Resilience Enhancement Kit sessions**

The Resilience Enhancement Kit was administered during a Life Orientation period and the 30 middle adolescents were divided into three classes of ten learners each. The teacher was also present during the administration of the sessions and participated as a facilitator during the activities. The middle adolescents appeared eager to participate in the sessions and they reported that they were looking forward to the lessons because "it was different from what they were used to".

### **6.8.2.1. Session 1: Orientation**

The aim of this session was to introduce the middle adolescents to the concept of resilience through the use of a picture depicting the saying "if life hands you lemons make lemonade" as well as a visual depiction of resilience. The facilitators asked the participants to recall information from their own life or think of someone they know who seemed to cope while the situation he or she was in seemed dire. The participants was eager to share stories that related to their life world for example how friends they had who abused drugs were helped to overcome it as well as stories about how people who lost loved ones due to sickness or death coped. Due to the pressures placed on middle adolescents through peer pressure to use drugs that are easily accessible and the grim reality of illnesses like Aids or the trauma of death after hijacking or robbery is a reality the middle adolescent has to live with in an inner city environment. The middle adolescents' frame of reference with regard to the adversities in the inner city might be slightly different to that of a middle adolescent living in a different environment and could be investigated in future studies.

The participants were asked to participate in creating some rules and regulations that they needed to adhere to during the contact sessions. By involving the middle adolescent in defining the boundaries it ensured that they experienced acknowledgement and validation especially because middle adolescents often complain that adults are too prescriptive and seldom listen to what they have to say. The activity where the middle adolescents had to choose and paste pictures of events in their lives or the lives of someone they knew that depicted adversity proved difficult for some adolescents because they were unsure of what picture would represent the issue they were thinking of and therefore they asked for assistance. This difficulty with representation of a concept could be contributed to the fact that they have not developed the cognitive maturity (Piaget's formal operational phase) to amalgamate the concrete and the abstract.

The role of the researcher was to facilitate understanding of the concept, which the middle adolescents successfully grasped. The evaluation questionnaires the

learners had to complete after each session was divided into what they learned from the session, how they could apply the competencies as well as what they enjoyed and would change to improve the Resilience Enhancement Kit.

#### **6.8.2.2. Session 2: Emotional competence: identification, management and communication of emotions**

The aim of this session was to empower the middle adolescent to be able to identify, manage and communicate (verbal and non-verbal manner) emotions. In the first activity the facilitator (teacher and psychologist) initiated a group discussion and demonstrated the differences in verbal and non-verbal communication (eye contact, tone, personal space) which can also be culture specific and the middle adolescents were also asked to dramatize a scene where they demonstrate the skills they have learnt. One of the areas under discussion was the differences in the way cultures communicate on a non-verbal level and it became apparent that most of the middle adolescents were unfamiliar with this aspect. The influence of globalization and the way the media portrays social and cultural behaviour seems to have affected the South African middle adolescent. It was observed that the way the American teenager is portrayed in the media is the way that some of the middle adolescents dressed for their acting parts during role play activities, behavioural movements (such as hand signals) as well as the language (slang) they spoke. The imitation of American role models in the media could also affect the way that the South African middle adolescents deal with adversities and stressors in their lives (for example gangster-like aggressive behaviour or apathy towards others if they do not conform to the group norms). Identifying the intensity and different types of emotions were achieved by means of colour-coded cards with faces that reflected emotions and emotional labels. The middle adolescents had to match up the words with the faces and give examples how the different intensities will be exhibited in daily functioning. The middle adolescents found the more complex blends of emotions difficult to identify and in the questionnaire regarding their emotions they chose the most

familiar emotions to describe their feelings. This could be due to lack of teaching the middle adolescents at school and home the emotional competencies that relate to identifying emotions. The mind map on managing emotions proved to be successful and the middle adolescents were able to apply the skills although it was felt that prolonged reinforcement is necessary to consolidate this competency.

#### **6.8.2.3. Session 3: Emotional competence: empathy**

The aim of this session was to identify and communicate empathy towards others. The middle adolescents were asked to identify the theme in a song that was played for them, which they could successfully do although they described it as "caring for others" or "we all have the same feelings". The middle adolescents were asked to imitate the mirror image of their partner (facial expression, behaviour) and label the emotion that was expressed to empower them to attend to non-verbal expressions and be sensitive to what others are experiencing. The middle adolescents enjoyed this activity although guidance was necessary from the facilitator to help them with identifying the emotion, as the emotion was not always expressed in a clear manner. It was easy for the middle adolescents to identify three people in their life who they could rely on to be a support in difficult situations which consisted first of friends and then siblings and parents that reflected the importance of the peer group in this developmental phase over the influence of the family. The middle adolescents had to refer to the mind map regarding empathy to remind them of the principles on how to empathize whilst applying it to a peer sharing an emotional story. The individuals the middle adolescents identified as role models in society that show empathy towards others were predominantly linked to sport players or movie actors that do charity work and is reflective of the role society has on the middle adolescent's perceptions.

#### **6.8.2.4. Session 4: Emotional competence: ego-resiliency**

The aim of this session was to guide middle adolescents to enhance and manage their ego-resiliency. At the beginning of the sessions, the middle adolescents were told that they would receive a chocolate cake at the last session for actively participating. This action was taken to teach the middle adolescents that to obtain a worthwhile goal or reward it is necessary to delay immediate gratification and focus on the current task. This proved to be successful because at the last session the middle adolescents were quick to remind the facilitator that they worked hard and deserved their chocolate cake. The activity that related to their wishes and wants, the reasons for them and how they would achieve them indicated that the answers given by the middle adolescents were idealistic wishes and wants and they could not always motivate how they would achieve them. This is characteristic of the middle adolescents' developmental phase where they offer idealistic solutions for complex problems that can lead to disappointment when their solutions do not rectify the stressors and adversities they experience. Teaching ego-resiliency skills and asking the middle adolescents to apply them in a group game proved successful, especially for the impulsive learners because they were forced to be patient and make realistic decisions. The facilitator role in this activity was that of monitor to ensure that the interactions between the learners were geared towards the aim of this session.

Replies from the evaluation forms that could be in group form or on an individual level were completed after administering the various competencies in the Resilience Enhancement Kit. The middle adolescents indicated that they learned the following related to their emotional competence:

- ❖ Dealing with people in the correct way;
- ❖ learning about feelings and emotions and how to control and use them;
- ❖ having compassion for others and understanding what other people go through;

- ❖ taking responsibility for your actions.

#### **6.8.2.5. Session 5: Social competence: positive relationships-friendship**

The aim of this session was to facilitate the identification and management of making and keeping friendships individually and within a group. It was observed that the Black middle adolescents especially enjoyed the activities such as role-play, dramatization and music. This could be due to cultural differences because music, dance and rhythm are an essential part of celebrations and daily living in the Black culture as a way of expressing themselves. The middle adolescents were very responsive in identifying characteristics that they feel are important to have as a friend. The discussion between the facilitator and the middle adolescents revealed that although they considered the positive characteristics (honesty, trustworthiness, dependability) of a friend as important, inclusion into the peer group depends on conforming to the group norms (attitude and behaviour) and if that does not happen the middle adolescent can risk being ostracized. The activity where the middle adolescents had to interview their classmates regarding the sharing information they did not know about them previously, was successful and the middle adolescents' thoughts were guided by questions to help them focus. The middle adolescents reported that they "learned a lot from each other". It was observed that this activity had a positive effect on the middle adolescents who tend to be loners in the classroom because they could share information with middle adolescents who could be viewed as leaders in their peer groups in an effort to change their perception of them. The middle adolescents' wish to be part of and accepted by the peer group was a significant theme in this session.

#### **6.8.2.6. Session 6: Social competence: positive relationships-getting along with others**

The aim of this session was to identify, manage and enhance relationships when working in a group. The group activities revealed that there were middle

adolescents who naturally took the lead and others sat quietly and allowed them to make the decisions for them. Even with rotating the group leader to give all the learners a chance to lead, these quiet middle adolescents found it difficult to contribute that might be due to their temperaments. During the early stages of the sessions, it was necessary to talk to the learners about including everyone in the groups because there were some middle adolescents who the group members did not want as part of the group. This behaviour improved as the sessions progressed because the activities are structured to make the middle adolescents aware of the positive characteristics of their peers and as a result they are viewed in a different light other than just outward appearance and conformity to group behaviour which are of importance in this developmental phase. It was observed that the middle adolescents took a long time to complete written tasks and required reinforcement to think of ways how people in the school context work together. This might be contributed to the fact that the middle adolescent phase is characterised by a focus on the self and at times disregarding the people around them if they are not directly involved with them. The success of the activity to apply the skills to work effectively in a group depended on the group's composition (learners with domineering temperaments). The groups consisting of middle adolescents with a domineering temperament tended to experience more conflict than the others did. A small percentage of the middle adolescents would have preferred to work alone (autonomy).

#### **6.8.2.7. Session 7: Social competence: sense of self**

The aim of this session was to identify, manage and enhance personal aspects such as self-identity, self-efficacy and self-perception. The middle adolescents enjoyed using their creativity to develop a character that represented them, especially because it was linked to recreational activities, which they enjoy like computer games. It became apparent in this activity that the middle adolescents were unsure about their personal attributes and requested assistance from the



facilitator to function as a sounding board for their ideas and as a motivator. It was also easier for them to tell someone else how they were like instead of reflecting on themselves. Their lack in self-knowledge could be understood as part of developing their own identity and role in life which is part of their developmental phase. The middle adolescents were successful in utilizing their management skills to apply it to the real life scenario and they debated the ways in which the dilemma in the situation could be approached in different ways, which is a reflection of their increased reasoning abilities during this phase.

Replies from the evaluation forms, that could be in group form or on an individual level were completed after administering the various competencies in the Resilience Enhancement Kit. The middle adolescents indicated that they learned the following related to their social competence:

- ❖ Respecting themselves and others;
- ❖ being aware of the way they speak and act towards others;
- ❖ creating friendships;
- ❖ accepting yourself for who you are;
- ❖ how to communicate with people.

#### **6.8.2.8. Session 8: Cognitive competence: meta-cognition**

The aim of this session was to identify, manage, enhance and utilize their meta-cognitive competencies consisting of problem solving, decision making and reframing of thoughts. The activity that required the middle adolescents to choose between two envelopes and then complete the task that was required of them proved to be successful. The middle adolescents shared experiences of when they or someone they knew got into trouble and the creative ways in which they wanted to solve the problems even if they made the wrong choices. The facilitator guided the questions posed to them regarding the alternative results based on approaching the problem or situation differently. The spontaneous

sharing of experiences resulted in incidental learning that the Resilience Enhancement Kit aims to foster as well. The activity of solving a mystery caused excitement between the groups to see who could solve the mystery first. This activity was developed to guide middle adolescents regarding their way of solving problems and making decisions through guided questions regarding the process they followed with the mystery activity. The middle adolescents were able to utilize the skills learnt from the meta-cognition mind map and apply them to identify problems within the school as well as solving these problems.

However, the problems identified were limited and very concrete and the facilitator needed to encourage the learners to think more extensively. This difficulty experienced by the middle adolescents' correlates with the views discussed earlier in this research that the middle adolescents might not be on the formal operational stage of their development and still have difficulty with solving problems and making decisions with the future goals in mind.

#### **6.8.2.9. Session 9: Cognitive competence: future expectations and goals**

The aim of this session was to identify, manage and communicate future expectations and goals. It was observed that the future careers the middle adolescents wrote down in their first activity indicated that they have not seriously considered their future. The activity related to creating playing cards that reflected how their future would look like after a few years proved to be difficult for the middle adolescents because they tend to live for the here and now and not consider long-term plans. It became apparent that they needed guidance from the facilitator in forming a measurable plan of action for the school's fun day. The group dynamic indicated that there were middle adolescents who were enthusiastic about the project while there were group members who procrastinated in contributing their share in the planning of the event.

Replies from the evaluation forms, that could be in group form or on an individual level were completed after administering the various competencies in the Resilience Enhancement Kit. The middle adolescents indicated that they learned the following related to their cognitive competence:

- ❖ Knowing that you are never too young to start thinking about your future;
- ❖ people should be realistic in what they want;
- ❖ to start thinking about your problems differently.

#### **6.8.2.10. Session 10: Consolidating competencies: board game**

The aim of this session was to give the middle adolescents the opportunity to apply the competencies learnt in the sessions to real-life situations. The session where the middle adolescents had to play the board game and exhibit their competencies they obtained during the sessions was very successful. The period they played the game was before a lunch break and the learners enjoyed the session so much that they did not want to leave when the bell rang for them to have their break but wished to continue playing. The learners appeared to be very supportive of each other and when one of the middle adolescents did not answer according to the competencies he or she had gained, the rest of the group reminded the middle adolescent of the appropriate way to answer the question or situation card based on the management skills represented on the mind maps. The use of colour and mind maps in geometrical forms to convey the skills necessary to manage the various resiliency competencies proved to be successful although the learners needed reinforcement to consolidate the competencies.

Replies from the evaluation forms, that could be in group form or on an individual level were completed after administering the various competencies in the Resilience Enhancement Kit also revealed:

a) The activities they enjoyed in the sessions were:

- ❖ Playing games;
- ❖ acting out situations;
- ❖ the fun and relaxing atmosphere;
- ❖ eating cake.

The middle adolescent could have identified these aspects of the Resilience Enhancement Kit because learners are open to learning if the environment is emotionally and socially accessible and the content enjoyable.

b) The only suggestions the middle adolescents made to improve the Resilience Enhancement Kit included playing more games because they can have the opportunity to be actively involved in learning on an informal social level, which makes them open to incorporate new competencies.

c) The aspects that the middle adolescents did not enjoy was:

- ❖ Arguing in the groups;
- ❖ some of the learners who did not behave themselves;
- ❖ talking about personal emotions.

Considering the middle adolescents' developmental phase the answers given reflect their characteristics as discussed in the literature review regarding being impulsive, not being able to manage their emotions and competing in the peer group for social acceptance and conforming to social norms of the group.

### **6.8.3. Analysis of the Resilience Enhancement Kit as measured by the Resiliency Scale.**

The Resiliency Scale for learners was administered to gain insight into how middle adolescents view their level of resilience. The items of the pre-and post

test (Resiliency Scale for learners) were compared to ascertain if the Resilience Enhancement Kit altered the competencies found in the middle adolescents' resilience modalities, which also informed on the reliability of the assessment instrument (Resiliency Scale). The Resiliency Scale for learners (pre- and post test phase) was administered after the 10 sessions (one session a week for 3 groups of ten learners) was completed. The analysis of the participant's answers were categorized according to gender with the aim of ascertaining whether there are differences in the way females and males view their level of resilience.

Furthermore, the teachers who were randomly chosen were asked to identify middle adolescents from the grade 8 group and to complete the Teacher Scale with regard to those learners who they felt displayed high and low levels of resilience. The teachers were not able to discuss the choice of learners amongst themselves. The scores of the similar learners chosen by the teachers were compared to those learner's personal scores in the pre-test phase. The aim of this comparison is to ascertain if there is any differences in the way middle adolescents view their level of resilience to that of how teachers, as significant role players in the school context, view the middle adolescents' level of resilience. Unfortunately, the results of five of the learners participating in the research could not be incorporated fully in the analysis of data due to their prolonged absenteeism during the period the post-test was administered.

The Resiliency Scale for learners is based on a four-point scale. The middle adolescent is required to evaluate each statement according to this scale:

|          |   |
|----------|---|
| <b>1</b> | No / Never (Strongly disagree)                  |
| <b>2</b> | Seldom / Only occasionally (Disagree)           |
| <b>3</b> | Usually / Good deal of the time (Agree)         |
| <b>4</b> | Entirely/ At every opportunity (Strongly agree) |

The comparison of the items of the pre-and post test (Resiliency Scale) are indicated as follows:

- a cross (+) sign if the Participant showed an increase in the way he or she views that variable of their resilient functioning;
- a minus (-) sign if the Participant showed a decrease in his or her view;
- a black equal (=) sign if the Participant showed no change in his or her answers from the previous assessment but falls within the positive side of the scale;
- a red equal sign (=) if the Participant showed no change in his or her answers but it falls within the negative side of the scale;
- The comparison of the items was divided according to the Participant's gender.

The questions found in the Resiliency Scale can be subdivided into the following:

**Emotional competencies:**

Question 1-30 encompass the emotional resiliency and can be subdivided:

- empathy (1-10),
- emotions (11-20) and
- ego-control (21-30).

**Social competencies:**

Question 31-55 encompass the social resiliency and can be subdivided:

- relationships (31-40) and
- sense of self (41-55).

**Cognitive competencies:**

Questions 56-75 pertain to cognitive resiliency and can be subdivided:

- meta-cognition (56-65) and
- future expectations and goals (66-75).

**6.8.3.1. Female participants' results**

**Participants: Girls (A-I) Table 3**

**Resiliency Questions**

| ?   | A | B | C | D | E | F | G | H | I |
|-----|---|---|---|---|---|---|---|---|---|
| 1.  | + | - | = | + | + | + | = | + | = |
| 2.  | + | - | - | = | - | + | - | + | = |
| 3.  | = | - | - | + | + | + | + | - | - |
| 4.  | + | - | + | + | - | + | = | + | = |
| 5.  | + | = | + | + | = | + | = | + | - |
| 6.  | - | - | + | = | + | + | + | = | = |
| 7.  | + | = | + | + | = | + | + | = | - |
| 8.  | + | + | = | + | + | = | + | + | = |
| 9.  | - | + | - | = | = | + | = | + | = |
| 10. | + | - | + | + | = | = | = | + | = |
| 11. | + | + | = | + | = | + | + | + | + |
| 12. | - | = | - | = | = | = | - | = | = |
| 13. | - | - | + | + | = | + | + | = | = |
| 14. | + | = | = | - | = | + | + | = | - |
| 15. | = | = | + | + | + | + | = | = | + |
| 16. | + | = | + | + | + | = | + | + | = |
| 17. | + | = | = | + | = | + | + | + | + |
| 18. | - | + | = | + | = | = | = | + | - |
| 19. | + | - | + | = | = | + | + | + | = |
| 20. | + | - | = | = | + | + | = | + | + |
| 21. | = | = | = | - | = | + | - | - | + |
| 22. | + | + | = | = | = | + | = | = | - |
| 23. | = | = | + | + | = | = | + | = | = |
| 24. | + | = | + | + | + | + | - | = | - |
| 25. | - | = | - | = | = | = | = | = | = |
| 26. | - | = | = | + | - | = | - | + | + |
| 27. | - | - | + | + | = | = | = | = | - |
| 28. | - | - | + | + | = | + | = | + | = |
| 29. | - | = | = | + | = | + | - | + | + |
| 30. | - | + | + | + | = | + | - | + | = |
| 31. | + | - | = | - | + | + | = | = | = |
| 32. | - | - | = | = | + | + | + | = | = |
| 33. | = | = | + | + | + | = | = | = | - |
| 34. | + | = | = | + | = | = | = | = | = |
| 35. | = | - | - | - | - | = | = | = | + |
| 36. | + | + | = | = | = | = | = | + | = |
| 37. | - | - | = | + | = | = | = | + | = |
| 38. | = | - | + | = | = | + | - | + | = |

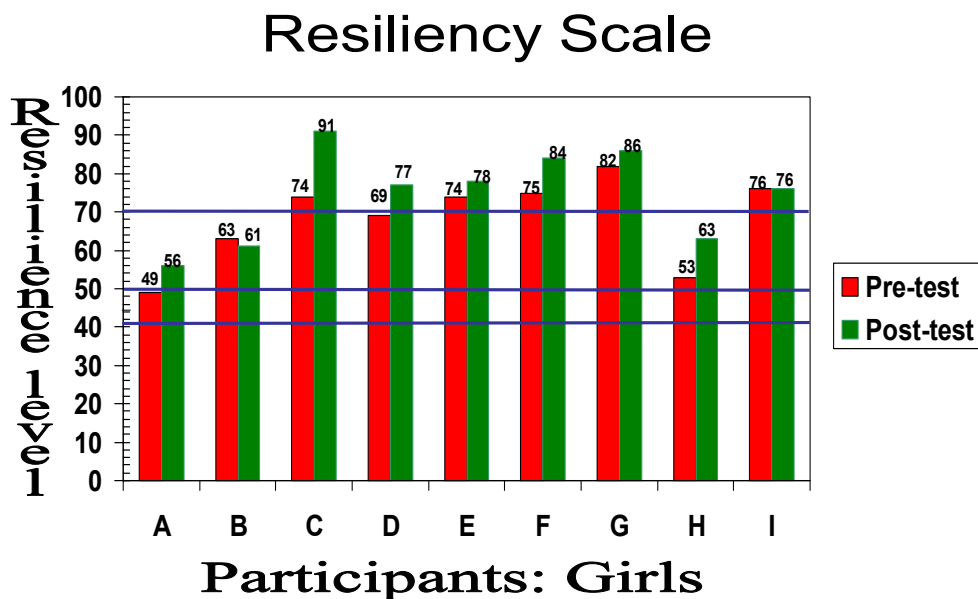
|     |   |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|---|
| 39. | + | - | + | + | + | + | - | + | - |
| 40. | + | + | = | = | = | + | - | + | = |
| 41. | + | + | + | = | + | + | = | + | - |
| 42. | - | = | = | + | + | = | = | + | = |
| 43. | + | + | = | = | + | + | = | + | + |
| 44. | = | + | + | = | = | + | = | + | + |
| 45. | - | = | = | = | = | = | - | + | = |
| 46. | + | + | - | = | = | = | = | + | = |
| 47. | + | + | = | = | - | + | = | + | + |
| 48. | - | = | + | = | - | = | = | + | = |
| 49. | + | - | = | + | - | + | - | + | = |
| 50. | + | + | - | + | = | = | - | = | = |
| 51. | - | = | - | + | - | = | = | = | = |
| 52. | + | + | = | + | - | + | - | = | = |
| 53. | = | = | = | + | = | + | = | = | = |
| 54. | + | = | - | - | = | = | - | = | = |
| 55. | = | + | + | + | - | + | + | = | - |
| 56. | = | + | + | = | = | = | = | = | = |
| 57. | = | + | = | + | = | + | + | = | = |
| 58. | + | = | + | - | = | = | = | = | + |
| 59. | + | = | + | - | = | + | = | = | = |
| 60. | + | = | + | + | = | = | = | - | - |
| 61. | + | + | + | - | = | + | + | - | = |
| 62. | = | + | + | = | = | + | = | = | = |
| 63. | + | + | = | = | = | + | = | = | + |
| 64. | + | + | = | = | = | + | - | = | = |
| 65. | + | + | + | + | - | + | + | = | = |
| 66. | + | + | + | = | + | + | = | = | + |
| 67. | = | - | + | + | = | + | = | = | = |
| 68. | + | - | + | + | = | - | = | = | = |
| 69. | = | + | + | = | = | = | = | = | + |
| 70. | - | + | = | = | = | + | + | = | + |
| 71. | - | = | + | = | = | + | = | = | + |
| 72. | + | + | + | = | = | + | + | = | + |
| 73. | + | - | - | = | = | + | = | = | + |
| 74. | + | - | + | - | = | + | = | = | = |
| 75. | - | = | - | = | = | = | = | = | + |

The interpretation table (y-axis of the graph) is outlined below and reflects the Department of Education’s guide for levels of achievement and was chosen because it is closely resembles the scales of the Resiliency scale of Shekill and it is developed to be used within the school context where assessments is guided by this level descriptors.



|        |   |
|--------|---|
| 70-100 | Very Resilient  |
| 50-69  | Average in Resiliency   |
| 41-49  | Needs assistance in some areas to increase Resiliency         |
| 0-40   | At risk, intensive intervention necessary to build Resiliency |

Graph 1:



The summarized score of the female participants illustrated by the graph indicates that seven of the nine participants had an increase in the way they perceive their level of resilience after administering the Resilience Enhancement Kit. Participants C, E, F, G and I all viewed themselves as very resilient in the pre-and post tests. Participant D viewed herself as having average resilience competencies in the pre-test but in the post test viewed herself as being very resilient. Although participants A and H showed an increase in resilient functioning, they still viewed themselves as having average resilience competencies. Participant A viewed herself as needing assistance with her resilient functioning in the pre-test but after the Resilience Enhancement Kit

sessions; she views her resilient functioning as average. Participant A showed a seven point increase in functioning; participant C a seventeen point increase; participant D an eight point increase; participants E and G a four point increase; participant F showed a nine point increase and participant H showed a ten point increase in the way they perceive their level of resilience. Participant B showed a two-point decrease compared to the score obtained from the pre-test while participant I showed no change in her perception of her resilient functioning. The items that constitute the different resilient modalities are compared (pre-and post-tests) the following became apparent:

❖ **Emotional Competence:**

Emotional competence encompasses empathy, emotions and ego-control.

➤ **Identifying, managing and communication of emotions**

Under the section identification, management and communication of emotions participants A, C, D, F, G, H and I experienced an increase in this area of resilient functioning. Participant E did not show a significant deviation from the answers given in the pre-test to that of the post-test. Participant B felt that she had not mastered the necessary competencies for this area of resilient functioning. The results indicate that three of the female participants appear to have difficulty with calming themselves when feeling anxious and being able to discuss their feelings with others.

➤ **Empathy**

Participants A, C, D, F, G and H showed an increase in empathy competencies after participating in the Resilience Enhancement Kit. Participants B and E felt that they had not mastered the necessary empathy competencies. Participant I's answers in the pre- and post-tests for empathy remained largely the same. The items that the participants still appear to have difficulty with is understanding the

difficulties other people go through and the way they think, being interested in what people have to say as well as trying to look at everybody's side of a disagreement before making decisions. It must be kept in mind that in the middle adolescents' developmental phase their focus is concentrated on themselves.

➤ **Ego-resiliency**

The section related to ego-resiliency was particularly difficult for the female participants. Participants C, D, F and I experienced an increase in their competencies. Participant E did not show any significant deviation in the pre- and post test scores. Participants B, G and H showed an equal number of items in which they experienced an increase in competencies to those in which they feel they need further development. Participant A experienced a decrease in her perception of her level of ego-resiliency. The items in which the participants showed a combined decrease in their perception of their level of ego-resiliency includes behaving impulsively to get what they want, adjusting and making decisions that are realistic, practical and reachable as well as manipulating people or situations to get what they want.

❖ **Social competence:**

Social competence can be subdivided into healthy positive relationships (for example working in groups, making friends) and a sense of self (self-identity, self-efficacy, self-perception and autonomy).

➤ **Healthy positive relationships**

Three of the female participants (A, D and F) experienced an increase in the competencies for healthy positive relationships, while another three participants (C, G and I) showed no change in their level of competence but their responses fell within the positive range of the scale. Participants E and H showed no significant deviation in their answers from the pre- and post test, however their

answers fell within the negative range of the scale. Participant B showed a slight decline in the way she perceived her level of resilient functioning related to competencies for positive relationships. The items on which the participants experienced a combined decline in their answers related to creating their own safety when faced with physical threats or when they are exposed to violent situations as well as having a teacher at school who really cares about them and listens to them. These concerns have an impact on how the school has to address the female learner's needs.

➤ **Sense of self**

The correlated items on the subdivision sense of self revealed that five of the nine participants (A, B, D, F and H) experienced an increase in this competency after the administration of the Resilience Enhancement Kit. Three of the participants' (C, G and I) pre- and post test answers were the same in favour of the positive side of the scale. Participant E's answers indicated a decrease in her level of resilient functioning for this competency, which implies that this is an area in need for further development. The items that needs for further development includes knowing their strengths and abilities, understanding their moods, gaining confidence to stand by their beliefs and fulfilling a role in society.

❖ **Cognitive competence:**

Cognitive competence includes meta-cognition (problem solving, decision making, locus of control) and future expectations (goals, purpose, aspirations).

➤ **Meta-cognition**

Five of the nine participants (A, B, C, D and F) viewed themselves as more meta-cognitively competent in their resilient functioning after participating in the Resilience Enhancement Kit. Participants E, G and I's majority of answers remained the same in the pre- and post test in favour of the positive side of the

scale. Although participant H's answers remained the same in the pre- and post tests, the answers all fell within the negative side of the scale. This would imply that her perceptions would negatively affect her scholastic functioning as well. The items of concern for some of the participants included following through with plans they have made as well as feeling able to handle many things at a time. Five participants (A, B, C, F and I) feel more competent with regard to their future expectations. Three of the participants (D, E and G) pre-test answers correlated with the post-test ones in favour of the positive side of the scale.

#### ➤ **Future expectations and goals**

Participant H's answers for her future expectation competencies showed no deviation and fell within the negative side of the scale. The items in need of further development included celebrating successes before moving onto the next goal, being positive and hopeful about the future, self-motivation and a belief that if they work hard they can achieve what they put their minds to.

#### ❖ **Summary of female participants' results**

In summary, the female participants appeared to experience an increase in their competencies related to resilient functioning after participating in the Resilience Enhancement Kit. Six participants (C, D, E, F, G and I) view themselves as very resilient and three participants (A, B and H) view themselves as average in resilient functioning after the post-test phase. As proposed in chapter one, resilience falls on a continuum and it became apparent that there are competencies, as outlined in the Resiliency Scale for learners and the Resilience Enhancement Kit, where the participants view themselves more competent than in others. The results indicate that the social competence (sense of self) is the primary area that the female participants experience a need for further development followed by the emotional- (ego-control) and then cognitive competence (future expectations). This findings correlate with the developmental phase of middle adolescents where they are still developing their own identity

(sense of self) and they often do not delay gratification because they are focused on the here and now, which also relates to future expectations.

**6.8.3.2. Male participants' results**

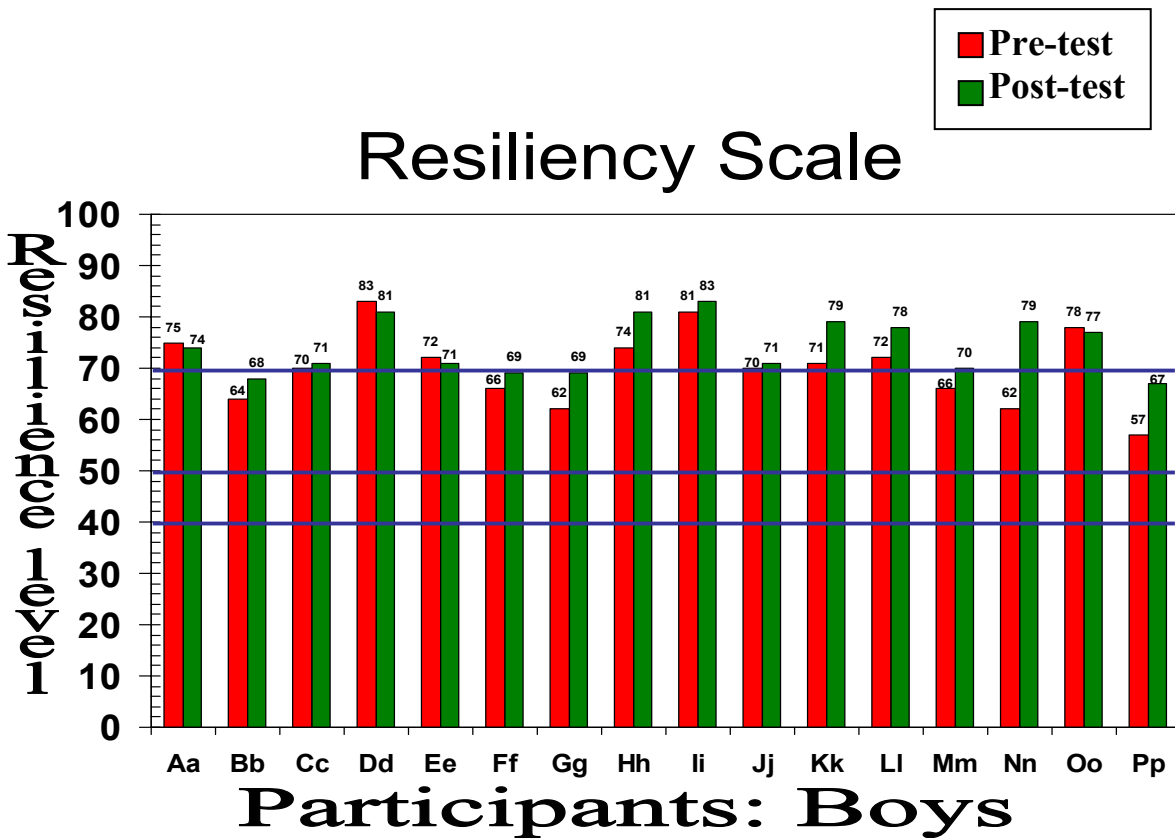
The comparative summary of the male participants' scores are outlined as follows:

**Participants: Boys (Aa-Pp) Table 4**

| Resiliency Questions | ?   | Aa | Bb | Cc | Dd | Ee | Ff | Gg | Hh | Ii | Jj | Kk | Ll | Mm | Nn | Oo | Pp |
|----------------------|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                      | 1.  | =  | +  | =  | +  | +  | =  | +  | +  | =  | =  | +  | =  | +  | =  | +  | +  |
|                      | 2.  | +  | +  | +  | =  | +  | +  | +  | +  | =  | +  | +  | =  | +  | =  | +  | +  |
|                      | 3.  | +  | +  | +  | =  | =  | +  | +  | +  | =  | +  | =  | -  | -  | -  | +  | +  |
|                      | 4.  | =  | +  | =  | =  | +  | +  | =  | +  | +  | =  | =  | +  | =  | +  | =  | +  |
|                      | 5.  | =  | +  | +  | =  | -  | =  | =  | =  | =  | -  | =  | +  | -  | =  | =  | =  |
|                      | 6.  | +  | =  | =  | +  | =  | +  | =  | +  | +  | +  | -  | =  | +  | +  | +  | +  |
|                      | 7.  | +  | =  | +  | +  | -  | =  | +  | +  | -  | =  | =  | +  | =  | +  | =  | =  |
|                      | 8.  | =  | +  | =  | -  | -  | -  | =  | +  | -  | =  | +  | -  | =  | +  | =  | +  |
|                      | 9.  | =  | +  | =  | -  | -  | +  | -  | +  | =  | =  | =  | =  | +  | +  | =  | +  |
|                      | 10. | =  | +  | +  | =  | =  | -  | +  | =  | =  | =  | +  | =  | =  | +  | =  | +  |
|                      | 11. | =  | =  | =  | +  | =  | +  | +  | =  | =  | =  | =  | =  | =  | =  | +  | =  |
|                      | 12. | -  | =  | -  | -  | =  | +  | -  | +  | =  | =  | +  | -  | -  | +  | -  | +  |
|                      | 13. | =  | -  | =  | -  | -  | =  | -  | +  | =  | -  | -  | +  | +  | =  | +  | =  |
|                      | 14. | +  | +  | -  | -  | -  | =  | +  | =  | -  | -  | =  | +  | =  | +  | +  | =  |
|                      | 15. | =  | +  | =  | =  | =  | +  | +  | +  | -  | =  | +  | +  | =  | +  | =  | =  |
|                      | 16. | +  | =  | +  | =  | -  | =  | +  | +  | -  | =  | +  | =  | +  | =  | =  | +  |
| 17.                  | +   | -  | =  | =  | =  | =  | +  | +  | =  | =  | =  | +  | +  | =  | -  | -  |    |
| 18.                  | =   | -  | -  | +  | -  | +  | =  | +  | =  | =  | =  | -  | +  | -  | =  | +  |    |
| 19.                  | +   | =  | +  | +  | -  | +  | -  | -  | =  | =  | -  | +  | =  | +  | -  | -  |    |
| 20.                  | +   | +  | =  | -  | -  | =  | +  | +  | -  | =  | -  | -  | =  | +  | +  | =  |    |
| 21.                  | +   | =  | =  | +  | -  | +  | +  | -  | +  | =  | +  | -  | -  | =  | +  | =  |    |
| 22.                  | =   | +  | =  | -  | -  | =  | =  | +  | +  | -  | =  | -  | +  | +  | =  | =  |    |
| 23.                  | -   | =  | =  | -  | =  | +  | =  | +  | =  | -  | =  | =  | =  | +  | =  | +  |    |
| 24.                  | =   | =  | =  | -  | =  | +  | =  | +  | -  | +  | -  | +  | =  | +  | =  | +  |    |
| 25.                  | +   | -  | =  | -  | -  | +  | =  | -  | =  | -  | =  | -  | -  | +  | =  | -  |    |
| 26.                  | -   | =  | =  | +  | +  | =  | -  | =  | +  | =  | -  | +  | =  | =  | =  | =  |    |
| 27.                  | +   | =  | +  | =  | -  | -  | +  | =  | -  | -  | +  | =  | =  | +  | -  | =  |    |
| 28.                  | +   | =  | =  | -  | =  | +  | =  | +  | -  | =  | =  | =  | =  | +  | =  | =  |    |
| 29.                  | =   | -  | =  | =  | =  | +  | +  | =  | +  | +  | +  | =  | =  | +  | +  | +  |    |
| 30.                  | =   | =  | =  | +  | =  | +  | +  | +  | +  | =  | =  | =  | +  | +  | +  | =  |    |
| 31.                  | =   | =  | +  | =  | =  | +  | +  | -  | +  | +  | +  | +  | =  | +  | =  | +  |    |
| 32.                  | +   | =  | =  | =  | =  | +  | +  | +  | +  | +  | +  | =  | =  | +  | =  | =  |    |
| 33.                  | =   | =  | +  | =  | -  | =  | +  | +  | +  | =  | +  | =  | +  | =  | =  | +  |    |
| 34.                  | +   | =  | =  | +  | =  | =  | =  | +  | +  | +  | -  | =  | =  | +  | +  | +  |    |
| 35.                  | +   | =  | =  | =  | -  | +  | -  | +  | +  | -  | +  | -  | =  | =  | +  | -  |    |

|     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36. | + | = | = | = | - | + | = | + | + | - | + | = | = | + | + | = |
| 37. | + | = | + | - | - | - | = | - | = | = | + | = | = | = | = | + |
| 38. | + | + | = | = | = | + | = | + | = | = | = | = | = | = | = | = |
| 39. | + | - | = | = | = | = | - | + | + | + | + | + | + | + | = | = |
| 40. | = | - | + | = | + | + | - | + | - | = | - | + | = | = | + | = |
| 41. | = | - | + | = | - | + | + | - | + | = | + | + | = | = | + | = |
| 42. | = | - | = | = | = | + | = | + | = | - | = | = | = | + | + | + |
| 43. | = | + | = | = | = | + | + | = | + | - | + | + | = | + | = | - |
| 44. | = | + | + | + | - | + | = | = | = | - | + | = | = | + | = | = |
| 45. | + | = | = | = | = | + | = | = | + | = | = | + | = | + | = | = |
| 46. | = | = | = | = | = | + | = | = | + | - | - | + | = | = | + | = |
| 47. | + | - | - | + | + | = | - | + | = | = | + | = | = | + | + | + |
| 48. | = | = | + | - | + | + | - | = | + | = | = | + | = | + | + | + |
| 49. | + | + | - | = | + | + | = | = | = | - | = | = | = | = | + | + |
| 50. | = | = | - | = | + | + | = | = | + | + | = | = | + | + | = | + |
| 51. | = | - | = | + | = | + | + | + | = | - | = | = | + | - | = | + |
| 52. | + | = | = | + | = | = | + | + | = | = | = | = | = | - | - | + |
| 53. | = | = | = | - | + | + | + | + | + | + | + | = | - | - | = | + |
| 54. | + | = | = | - | = | + | + | + | + | = | = | + | + | - | = | + |
| 55. | - | = | + | = | = | = | + | = | + | = | = | - | + | = | = | + |
| 56. | = | + | + | + | = | + | = | + | + | = | - | = | + | + | = | = |
| 57. | + | = | = | = | + | + | = | + | = | = | - | = | = | + | - | = |
| 58. | + | = | = | + | + | = | = | + | + | = | - | + | + | + | + | = |
| 59. | = | = | = | + | + | + | = | - | + | + | + | = | + | - | = | + |
| 60. | = | = | = | = | + | + | - | + | = | = | = | = | - | + | + | = |
| 61. | + | + | - | - | + | + | = | = | = | = | = | + | + | + | = | = |
| 62. | = | = | - | - | = | + | = | + | + | + | = | + | + | = | = | = |
| 63. | + | = | = | = | = | + | + | + | + | = | + | = | = | = | = | = |
| 64. | + | = | = | = | - | = | = | = | + | = | - | - | = | - | = | = |
| 65. | = | + | = | = | - | + | + | - | + | + | = | + | + | - | + | = |
| 66. | + | = | = | = | + | + | + | + | + | = | - | + | + | + | = | = |
| 67. | = | = | = | = | = | + | = | + | + | + | = | + | = | + | = | = |
| 68. | + | = | = | = | + | + | = | + | + | = | = | + | + | + | - | = |
| 69. | + | + | = | = | + | + | = | = | + | = | = | + | + | + | + | = |
| 70. | - | = | = | = | = | + | - | = | + | + | = | + | = | + | = | + |
| 71. | - | = | = | = | + | + | = | = | + | - | = | = | + | + | + | = |
| 72. | - | = | - | = | + | = | = | + | = | = | - | + | + | + | + | + |
| 73. | = | - | = | = | + | + | - | = | + | = | - | + | + | + | = | + |
| 74. | = | + | = | + | + | + | - | = | = | - | + | + | = | + | + | = |
| 75. | = | = | = | = | + | + | = | = | = | = | = | + | = | + | = | + |

Graph 2:



The summarized score of the male participants illustrated by the graph indicates that twelve of the sixteen participants had an increase in the way they perceive their level of resilience after administering the Resilience Enhancement Kit. Four of the participants (Aa, Dd, Ee and Oo) showed a decrease in their perception of their resilient functioning. Ten of the participants (Aa, Cc, Dd, Ee, Hh, li, Jj, Kk, LI and Oo) all viewed themselves as very resilient in the pre-and post tests. Participants Mm and Nn viewed themselves as having average resilience competencies in the pre-test but in the post test viewed themselves as being very resilient. Although four of the participants (Bb, Ff, Gg and Pp) showed an increase in resilient functioning, they still viewed themselves as having average resilience competencies. Participants Aa, Ee and Oo all showed a one-point decrease in functioning while Participant Dd showed a two-point decrease in his perception regarding his resilient functioning. Participants Bb and Mm both showed a four-point increase in their perception of their resilient functioning. Participants Cc and Jj showed a one-point increase while participants Gg and Hh



showed a seven-point increase in their perception regarding their resilient functioning after participating in the Resilience Enhancement Kit. Participant Ff showed a three point increase; Participant li a two points; Participant Kk eight points; Participant Ll six points; Participant Nn showed a seventeen point increase and Participant Pp showed a ten point increase in the way they perceive their level of resilience. If the items that constitute the different resilient modalities are compared (pre-and post-tests) the following became apparent:

❖ **Emotional Competence:**

➤ **Identifying, management and communication of emotions**

In the subdivision identification, management and communication of emotions eight of the participants (Aa; Ff; Gg; Hh; Ll; Mm; Nn and Oo) experienced an increase in their perception compared to their scores in the pre-test. Five of the participants (Bb; Cc; Dd; Ee and Kk) experienced a decrease in their views regarding their resilient functioning pertaining to emotions. Participants li and Jj did not show significant deviations in the scores from the pre- and post test, although their answers were in favour of the positive range of the scale. Participant Pp's answers reflect that three of his five answers that remained the same as in the pre-test fell within the negative range of the scale, two answers showed a decrease in perception while three answers showed an increase in his perception regarding his emotions. Although there was an increase in the learner's perception regarding this subsection on emotions, it did appear that the male learners experienced difficulties with applying the skills to calm themselves down if they feel angry; feeling remorse when they did something wrong or hurt someone. They also had difficulty with identifying their emotions and physical reactions they are experiencing, discriminating between the intensity of volatile emotions such as anger and being able to discuss their feelings with others.

➤ **Empathy**

Eleven of the male participants (Aa; Bb; Cc; Gg; Hh; Jj; Kk; Ll; Mm; Nn and Pp) experienced an increase in their perception regarding their level of empathy. Three participants (Dd; li and Oo) scores for the pre- and post tests remained the same in favour of the positive range of the scale. Participants Ee and Ff experienced a decrease in their level of resilient functioning related to empathy. However, there is questions related to empathetic behaviour that they experienced in a more positive light. There seems to be an increase in the way the male participants view their level of empathy but the male participants seem to experience difficulties with trying to understand why people think the way they do; being able to place themselves in other people's shoes and to be able to identify when people need help or support.

➤ **Ego-resiliency**

The subsection ego-resiliency revealed that eight of the participants (Aa; Bb; Ff; Gg; Hh; li; Jj and Nn) experienced an increase in their resilient functioning. Another seven participants' (Cc; Ee; Kk; Ll; Mm; Oo and Pp) answers remained the same during the pre-and post test but they fall within the positive side of the scale. Participant Dd showed a decrease in his perception regarding his ego-resiliency. The male learners revealed that they found it difficult to wait before they act or achieve a goal and to think about the situation they do not understand and then ask for help.

❖ **Social competence:**

➤ **Healthy positive relationships**

The results from the subsection healthy relationships revealed that seven of the sixteen participants (Aa; Ff; Hh; li; Jj; Kk and Nn) experienced an increase in their resilient functioning after participating in the Resilience Enhancement Kit. Seven of the participants (Bb; Cc; Dd; Ee; Ll; Mm and Oo) showed little deviation

in their answers from the pre- and post tests and fell within the positive side of the scale and participant Pp's answers fell within the negative side of the scale. Participant Gg showed a slight decrease in his perception regarding his relationships, however there were three answers that showed an increase and two answers that remained the same in favour of the positive side of the scale. Although there has been an increase in the male participants' perception regarding their resilient functioning within relationships, some of the participants still experience difficulties with identifying a teacher who really cares about them and listens to them as well as allowing negative criticism from family and friends to bother them.

➤ **Sense of self**

The items related to sense of self revealed that nine (Ff; Gg; Hh; Ii; Kk; Ll; Nn; Oo and Pp) of the sixteen participants experienced an increase in their perception of their resilient functioning. Six of the participants' (Aa; Cc; Dd; Ee; Jj and Mm) answers remained largely the same in the pre- and post test in favour of the positive side of the scale. Participant Bb showed a slight decline in his perception regarding this resilient functioning, however the same number of answers remained the same in favour of the positive side of the scale and on three items he showed an increase. The items some of the participants experienced difficulties with included drawing on their belief in themselves to get them through hard times, being flexible in dealing with stress, keeping a sense of humour when things get tough and feeling that they have a role to fulfil within society.

❖ **Cognitive competence:**

➤ **Meta-cognition**

The subsection meta-cognition revealed that eight of the participants (Aa; Ee; Ff; Hh; Ii; Ll; Mm and Nn) experienced an increase in their ability to problem solve and make decisions. Seven of the participants (Bb; Cc; Dd; Gg; Jj; Oo and Pp)

pre-test answers correlated with the post-test ones in favour of the positive side of the scale. Participant Kk's answers revealed that on two items he experienced an increase; four items remained the same as in the pre-test in favour of the positive side of the scale while four items showed a decrease in his perception regarding his resilient functioning. The participants answers indicated that they experience difficulties in their ability to find different solutions and thinking about alternative results by utilizing the "brainstorm" method as well as taking responsibility for decisions even if was the wrong ones.

➤ **Future expectations and goals**

Eight of the participants (Ee; Ff; li; Ll; Mm; Nn; Oo and Pp) experienced an increase in their resilient functioning for the subsection future expectations. The eight remaining participants' (Aa; Bb; Cc; Dd; Gg; Hh; Jj and Kk) answers remained the same in the pre- and post test in favour of the positive side of the scale. The item the participants felt a need for further development related to making choices and plans that are guided by their values.

❖ **Summary of the male participants' results**

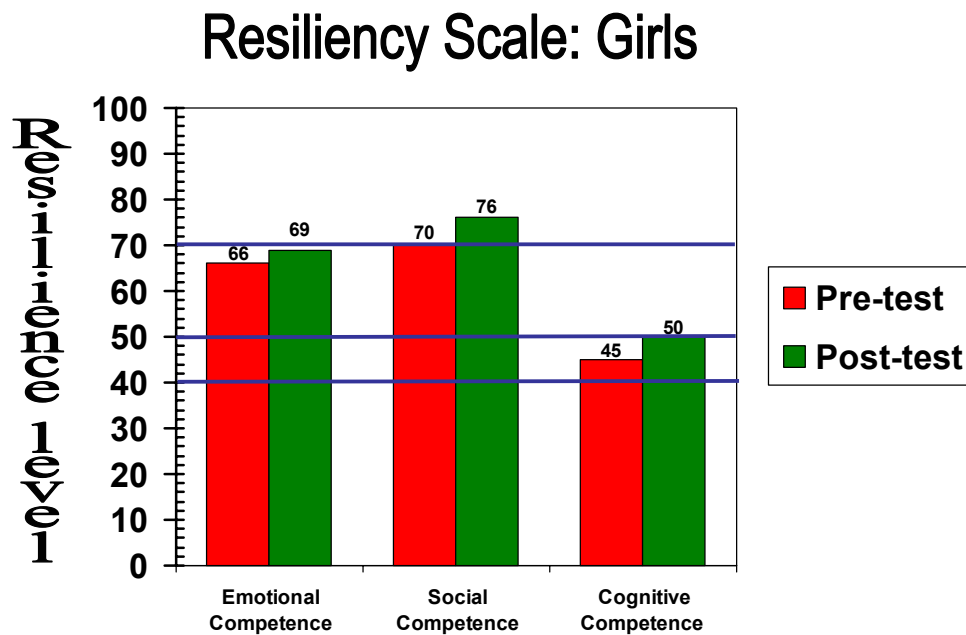
In summary, the male participants appeared to experience an increase in their competencies related to resilient functioning after participating in the Resilience Enhancement Kit. Twelve participants (Aa; Cc; Dd; Ee; Hh; li; Jj; Kk; Ll; Mm; Nn and Oo) view themselves as very resilient and four participants (Bb; Ff; Gg and Pp) view themselves as average in resilient functioning after the post-test phase. The results indicate that the competencies the male participants feel a need for further development is in the emotional competence (identification, management and communication of emotions; ego-control) followed by the social competence (sense of self). Due to social scripts, males are taught not to respond emotionally to situations, which could have an effect on why there is a need for further development. Boys tend to react more impulsively than girls do because they are focused on gratifying their needs because they are self-centered at this time in

their development. Just as with the female participants, the male participants are also still developing their identity (sense of self) which is part of this developmental phase.

### 6.8.3.3. Summary of combined Resilience competencies

If the average mean of the emotional-, social- and cognitive competencies regarding the girls' Resiliency Scale is taken into account after the Resilience Enhancement Kit was administered and the post-test phase completed the results can be indicated as follows:

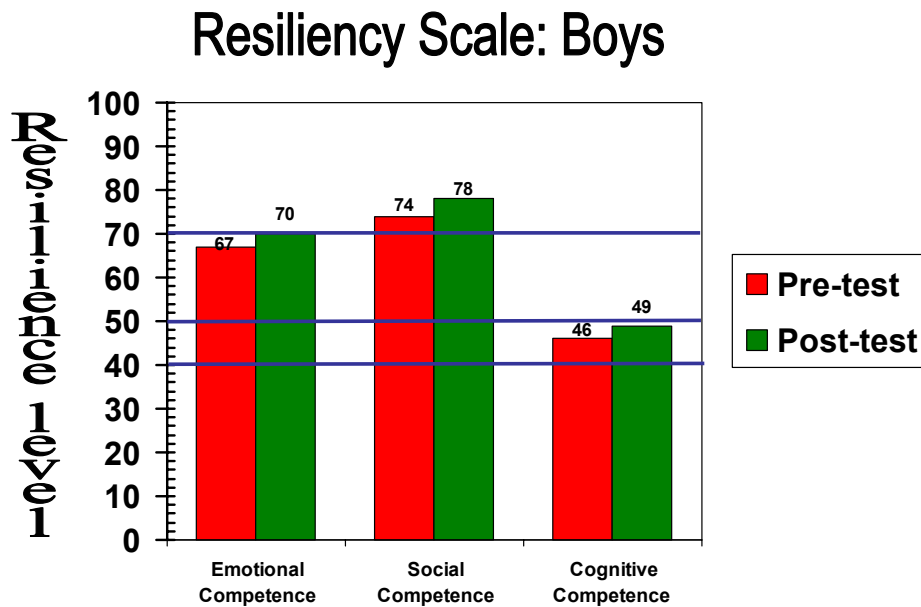
**Graph 3:**



The social resilience competencies are dominant in the female participants' life. This can be contributed to the strong bond female middle adolescents have with each other and as a result, they discuss all their problems with each other and use each other as a support system. After administering the Resilience Enhancement Kit there was an increase of 6-points in this competency. The second dominant competence in the female's life appears to be the emotional

resilience competencies. Female middle adolescents appear to be more in tune with their emotions than males and this might be due to the acceptance (social scripts) that females can express their emotions freely and for example use crying as an outlet when confronted with adversities in life. There was a 3-point increase in this competency after administrating the Resilience Enhancement Kit. The competency in need of further development is the cognitive resilience competency. Although there was a 5-point increase after participating in the Resilience Enhancement Kit, the female participants view this as an area for growth. Due to their cognitive development during this middle adolescent phase, they might still have difficulty in utilizing their meta-cognitive skills as well as setting future goals.

Graph 4:



The social resilience competencies are also dominant in the male participants' life. This can be contributed to the important role that peer acceptance and being part of a group has for this phase in development. After administering the Resilience Enhancement Kit there was an increase of 4-points in this competency. The second dominant competence in the males' life also appears to be the emotional resilience competencies. There was a 3-point increase in this

competency after administrating the Resilience Enhancement Kit. Although social expectations might limit the way boys express themselves emotionally, it appears that they do feel they have the ability to manage their emotions. Just like with the female participants the competency in need of further development is the cognitive resilience competency. There was a 3-point increase after participating in the Resilience Enhancement Kit but the male participants also view this as an area for growth. Due to their cognitive development during this middle adolescent phase, they might still have difficulty in utilizing their meta-cognitive skills as well as setting future goals.

The results from the post test phase (Resiliency Scale) revealed that half of the female participants compared to a third of the male participants viewed themselves as average in resilient functioning while the rest of the participants viewed themselves as very resilient. This implies that the male participants appear to view themselves as more resilient than the female participants do. The items on the Resiliency Scale for learners that correlate between the female and male participants are:

➤ **Emotional competency:**

- ❖ to calm themselves down when they feel anxious;
- ❖ discussing feelings with others;
- ❖ thinking before acting;

➤ **Social competency:**

- ❖ reflecting and asking for help;
- ❖ identifying a teacher who cares about them and listens to them;
- ❖ having a role to fulfil in society and being able to contribute as an middle adolescent.

➤ **Cognitive competency:**

- ❖ their ability to understand why people think the way they do;
- ❖ being able to wait for a period of time before getting something they want or achieving a goal.

**6.8.3.4. Gender specific results**

Some of the items identified by the female and male participants respectively appeared to be gender specific. The female participants appeared to have difficulties with being genuinely interested in what people have to say (adolescent girls are often malicious towards each other); manipulating people or situations to get what they want; creating their own safety when faced with physical threats or when they are exposed to violent situations. The male participants appeared to have difficulties with being able to place themselves in other people's shoes; feeling remorse when they have done something wrong or hurt someone; being able to identify their own emotions and taking responsibility for wrong decisions they make. Although society often attributes these above-mentioned aspects to males and females, it is noteworthy the middle adolescents themselves identified the aspects that have to be developed. As mentioned in chapters 2-4, child-rearing practices, social scripts and roles as well as naturalistic tendencies might all have an impact on the way middle adolescents view themselves.

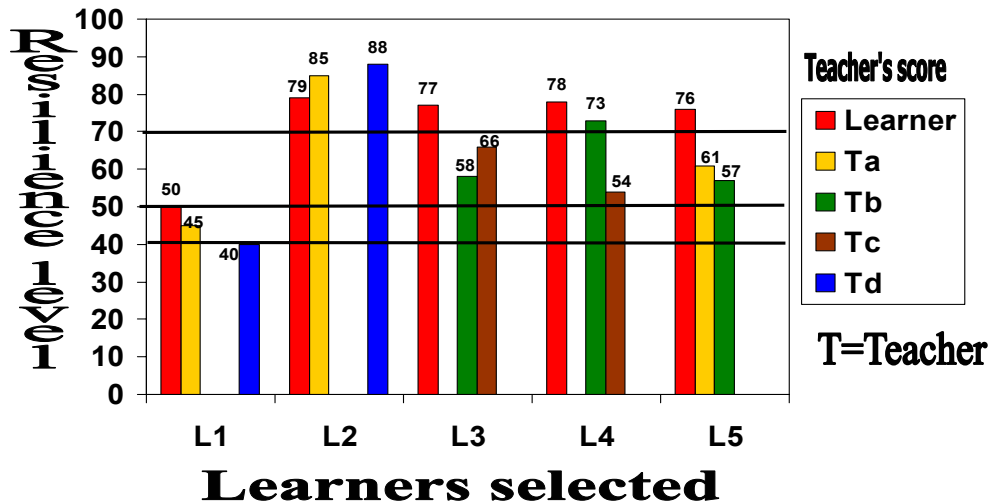
**6.8.3.5. Analysis of the comparison between the Resiliency Scale for Learners and Teachers.**

The comparison between the middle adolescents' scores related to their resilient functioning to that of how the teachers perceive the learners' level of functioning in the pre-test phase can be illustrated as follows:



Graph 5:

## Resiliency Scale: Teachers



Three of the learners (L1; L2 and L4) chosen by the teachers were male participants and two were female participants (L3 and L5). Learner one did not complete the post-test after participating in the Resilience Enhancement Kit due to relocation shortly after the last session was completed, but his pre-test indicated that he felt that he was average in his resilient functioning. Teacher A and D felt that learner one needed assistance with his resilient functioning and rated him 5-10 points lower than the learner's personal score. Learner two viewed himself as very resilient and both teachers A and D concurred. However, the teachers rated learner two higher (6-9 points) than the learner rated himself. Learner three views herself as very resilient but teachers B and C rated her average in resilient functioning with a 19-11 point decrease in the teacher's views. Learner four views himself as very resilient, which correlates with teacher B's view although there was a 5-point decrease in the teacher's view compared to the learner's score. Teacher C however, viewed learner four as average in his resilient functioning with a 24-point decrease in the teacher's view compared to the learners score. Learner five also experienced herself as very resilient but teachers A and B felt that she was average in her resilient functioning.

The teacher's views reflected a 15-19 point decrease in comparison to the learner's score for her resilient functioning.

The results therefore indicate that the learners experience themselves more resilient than the teachers view them. This might be contributed to the fact that teachers do not know the learners' history of how they rebound against adversity but it might also be because the middle adolescent has an idealized view of his or her competencies in dealing with life's stressors. The teacher's answers did not show a significant deviation between the resilience modalities.

- ❖ One of the significant items that the learners identified, was a need for a teacher who they can trust, who will listen to them and who cares about them. This implies that the learners' experience the teachers (significant role players in the school context) as uninvolved in helping them cope against the onslaughts of life.
- ❖ Furthermore, it seems the discrepancy in the learners' and teachers' views regarding the learners' resilient functioning, indicate that there is a significant difference in identifying the resilience modalities that need to be enhanced and developed by the learners to rebound against adversities.

A word of caution must be given at this time that the Resiliency Scales rely on middle adolescents' perceptions and opinions and as a result the scores is not a totally unbiased reflection of the middle adolescents' real-life functioning and must be kept in mind when interpreting and comparing the scales. The need for teachers and psychologist to become involved with learners in enhancing and developing their resilience modalities became apparent in this research and should therefore be addressed to ensure that learners become productive and well-adjusted citizens who can adapt to changes in the country.

**6.8.3.6. Factors identified by learners that influence their level of resiliency.**

An open-ended question was posed to the middle adolescents to ascertain what they consider an influence on their level of resiliency. The middle adolescents considered friends who accept them and care about them when they go through a tough time as the primary aspect that contribute to their ability to cope and rebound. The love, support and comfort of their family members was the second most common reason given by the middle adolescents that contribute to their resilient functioning. Eight of the learners felt that having a sense of humour and making jokes about difficult situations helped them cope. Five of the middle adolescents linked coping with difficulties in life to school functioning and reported that working hard in their subjects, trying their best in the subjects they do not understand, getting good marks and asking a teacher for help if they do not understand work are strategies they use to rebound. Single aspects that influence their resilient functioning were also identified and these aspects include playing sports, bonding with their pets, listening to music and drawing strength from their religion. However, three of the male middle adolescents felt that they did not have any resources to help them cope but they felt better when they used alcohol, smoked a cigarette, played war games on the computer or hit the person who caused them problems. It can be concluded that these perceptions of the middle adolescents reinforce the need for schools to assist learners in identifying resources they can utilize and competencies they can develop to enhance the middle adolescents' resilience modalities. The Resilience Enhancement Kit provides a guideline to assist teachers and psychologists in achieving this goal.

## 6.9. Conclusion

- ❖ The results obtained from the Resiliency Scale for learners as well as the evaluation questionnaires filled in by the middle adolescents revealed that the Resilience Enhancement Kit developed and enhanced the resilience modalities of the 14-year old inner-city learners.
- ❖ The comparison between the pre-and post test results revealed that the majority of middle adolescents view themselves as very resilient.
- ❖ There appear to be a gender difference in the way middle adolescents perceive their level of resilience and the male learners seem to view themselves more resilient than the female learners do. This might be due to the way boys are reared because of social scripts and that they are focused on solving problems quickly to be able to move on (example they get into a physical fight and the situation is over where girls tend to brood over problems and not address them head on).
- ❖ The high correlation level in the answers given in the pre- and post tests by the middle adolescents indicate that the Resiliency Scale is reliable and valid and is therefore an appropriate instrument to measure the level of resilient functioning in middle adolescents.
- ❖ The Teacher scale indicated there is a discrepancy in the perception of teachers and learners' regarding the middle adolescents' resilient functioning.
- ❖ The learners experienced a need for teachers to be a resource to be utilized in the school context.

In the next chapter the summary, conclusions and recommendations of the research will be discussed.

## CHAPTER 7

### Summary, conclusions And Recommendations

*"I applied my heart to what I observed  
and learned a lesson from what I saw"  
(Proverbs 24:32).*

#### **7.1. Introduction**

South Africa is part of a global community that is constantly evolving and developing and with this growth comes stressors and the need to adapt to changes and challenges. The middle adolescent is faced with these social factors as well as their developmental changes and an education system in transition. The necessity therefore arises for the Educational psychologists as consultants in partnership with significant role-players in the school context, to establish new intervention efforts to prevent risks factors and promote protective measures that can foster resilient functioning in middle adolescents. The Educational psychologist needs to be actively involved in research in this field, which will enable them to improve the delivery of services to middle adolescents.

The value and contribution of this research lies in the illumination of the questions regarding the identification of resilience modalities, and ways of assessing and enhancing the resilience modalities within the school context. Furthermore, this research added to the knowledge base regarding resilience functioning of the middle adolescents in the South African context as well as possibly incorporating the Resilience Enhancement Kit as an instrument to be utilized by teachers and psychologists within the school context. This research was successful in its aim to answer these questions. A summarized discussion of the chapters will illustrate the above-mentioned focus areas.

## **7.2. Summary and integration of research results**

### **7.2.1. Summary and integration of the literature review**

The paradigm shift in Educational Psychology to move away from the medical model that only focuses on deficits in middle adolescents but also to consider the strengths and abilities as well as working preventatively, evoked the research into enhancing the resiliency modalities of middle adolescents that could enable them to rebound against adversities and risks. In the **first chapter**, the introduction elaborates on the above-mentioned statement. The nature of resilience and the aspects that constitute resilience modalities are also discussed. The importance of the role of the school in fostering resiliency is addressed. The theoretical framework of resiliency is discussed and includes the social learning theory, cognitive behavioural theory, health realisation theory, ecological systems theory, positive psychology and the asset-based perspective.

The aim of the research is to describe and explore the process of how to appraise, develop and enhance the modalities of resilience of the South African middle adolescent in the school context and the analysis of the research problem is partitioned into sub-ordinary questions in order to address the identified research scope. The research methodology is presented, which comprises of a paradigmatic perspective regarding the Educational Psychological frame of reference (interpretive paradigm) from which this research is conducted, the literature review and the qualitative and quantitative empirical investigation. The empirical investigation highlights the use of case studies, sampling and population, Resiliency scale (Likert-type questionnaire) and open-ended question, Resilience Enhancement Kit as well as why triangulation is used in this research. Chapter 1 also contains an explanation of the concepts that are relevant to this research and the outline of the various chapters. The literature review comprises of three chapters on the emotional-, social- and cognitive modalities of resilience.

The **second chapter** focuses on the nature, origin and development of the emotional competencies in the resilience modalities of middle adolescents. Experiencing and expressing emotions are integral parts of human existence but middle adolescents often become desensitized towards their emotions or even disown them due to perceptions that it distorts reasoning and judgement. The chapter therefore focuses on the necessity of emotional competencies that can be seen as the ability to accurately perceive, appraise, express and regulate emotion in a verbal and non-verbal manner, which is a crucial aspect of resilient functioning.

The terms feelings, emotions and mood that are often proliferated together and these terms are discussed in this chapter. The research of emotion started with the early philosophers such as Plato and Aristotle in the 17<sup>th</sup> and 18<sup>th</sup> centuries and currently the theories of Schachter, Singer, Lazarus, Cannon, Bard, Ekman, James, Lang, Plutchik and Cacioppo are considered groundbreaking in the research of emotion. Emotions originate in the brain located in the prefrontal section, brainstem, amygdale and hippocampus, hypothalamus, cingulated gyrus and the papez circuit. Emotion consists of various modalities such as facial expression, physiological arousal, behavioural responses, subjective feelings and cognitive processes. A summary of the theories presented regarding the process of how emotion occur, could be explained as observing a stimulus or situation that is appraised for its relevancy for the middle adolescent. The middle adolescent then attributes a favourable or unfavourable meaning to the situation or stimulus based on the appraisal, physiological arousal and displays of peripheral expression experienced and finally a behavioural response follow. The composition of emotions and the interplay with a middle adolescents' emotional state is important in emotional functioning.

The middle adolescents' emotional state refers to the continuous state of mind where psychological-, biological- and value attributes as well as emotional tone

give rise to the positive and negative emotions. The intensity of emotions as illustrated by Plutchik's circumplex model as well as the binaries and compound nature of emotions is discussed in this chapter.

Furthermore, the influence that temperament and emotional intelligence have on a middle adolescent's emotions is highlighted. The function of emotions is seen as a vehicle of communication to establish and maintain social relationships, allowing middle adolescents to set emotional boundaries to protect themselves, addressing needs, to determine behavioural adaptation as well as acting as a motivational catalyst in learning and achieving goals.

In this chapter the appraisal process as well as the influence of emotional response patterning is discussed to illuminate the impact it has on the way middle adolescents adjust externally and internally as well as regulating their emotions based on previous experience and appraisals of stimuli and situations. The psychological appraisal of emotions is therefore crucial in aiding the Educational psychologists to assist the middle adolescent in managing his or her emotions. Magda Arnold set out to measure emotion by utilizing the Thematic Apperception Test. A series of methods was proposed with the aim of measuring emotion that included self-report questionnaires (Emotional State Rating scale), self-observations, non-verbal pictorial techniques and experimental methods of exposing middle adolescents to stimuli to elicit emotional responses. The chapter ends with a discussion regarding the need for schools to develop emotional competencies in middle adolescents.

The **third chapter** focuses on the investigation of the nature, origin and development of social competencies in the resilience modalities of middle adolescents. The middle adolescent is seen as being shaped by their social context as well as exerting an influence on the people around them. They must



form a social identity regarding their role and relationship with the members of the society in which they live.

Social competence encompasses learned behaviours that include cognitive and emotional processes, verbal communication and non-verbal behaviours that a middle adolescent uses in interpersonal situations and relationships. In the exploration of the social competence construct, related aspects such as social skills and social intelligence are defined as well as the components thereof. The exploration regarding the nature and origin of social competence commences with identifying the areas in the brain system involved with social functioning. The areas identified include the prefrontal cortex in the frontal lobe, the corpus striatum and amygdala as well as the orbitofrontal cortex or limbic frontal lobe.

The research and theories related to the development of social functioning started in the 1920's but was interrupted by the world wars and only in the 1970's did the disciplines of Education and Psychology focus their attention on social functioning with the work of theorist like Bandura and Harris and more recently Goleman. The three theories related to the understanding of social competence include the work of Dodge referred to as the social information-processing framework, Rose-Krasnor and Rubin's social problem solving framework that was further expanded by Ladd and Crick and the social co-construction theory of Valsiner. It must be mentioned that an amalgamation is provided and illustrated in this research regarding social competence that includes the theories as outlined above and the models of Reschly, Gresham and Guralnick.

The exploration of the development of social competence revealed that the formation of this competency begins at birth and progresses with the interaction between significant role players in the middle adolescent's life. The modelling, reinforcement, rehearsal and feedback of the desired behaviour or skills to the middle adolescent improve their social competency. Parental style, culture and

social scripts also seem to have a significant influence on the development of social competence. The literature review revealed that the appraisal of the middle adolescents' level of social functioning consist of observations, event recording, interviews and rating scales. The rating scales were discussed in terms of their function and limitations. Chapter three concluded with the role of the school in developing and enhancing social modalities that foster resilient functioning.

The **fourth chapter** addressed the nature, origin and development of the cognitive competencies in the resilience modalities of middle adolescents. Cognitive competence is interrelated with emotional- and social competence. At school, cognitive competence is seen as a fundamental element that learners need to master but it encompasses more than just academic skills. Cognitive competence enables the middle adolescent to analyze and integrate complex and varying forms of information and to utilise it in novel ways (critically and creatively) to solve problems and make decisions that impact on his or her future.

The nature of cognitive competence involves the capacity of the brain to think, reason and regulate cognitive processes. The area of the brain involved with higher order thinking skills (meta-cognition) includes the frontal, parietal and temporal lobes (Cerebral Cortex). The literature review also indicated that the middle adolescents' brain is still developing in the areas involved with cognitive competence and that middle adolescents might not function on the formal operational stage yet due to their maturity levels. The theory of cognitive competence as proposed by Fry is illustrated and discussed and consist of cognitive structures, processes and overt behaviours that are interactive and interdependent. The cognitive structures incorporate the middle adolescents' system of meaning attribution to what he or she experiences while the cognitive processes refer to the higher order thinking skills and the overt behaviours relate to interpersonal and intrapersonal behaviours. The construct meta-cognition (thinking style, problem solving and decision-making) is explored and its relation

to cognitive competence. The development of cognitive competence occurs through natural maturation, as described by Piaget and Vygotsky, and through the interaction with significant role-players in the middle adolescent's life.

The exploration of the psychological appraisal of cognitive competence revealed there are several instruments that focus on cognitive ability and proficiency but few assessment instruments that encompass the cognitive competencies necessary for resilient functioning. The instruments were discussed in terms of their relevance and limitations and included the Perceived competence scale for children and the PASS+S dynamic assessment instrument. The chapter was concluded with a discussion regarding cognitive resilience and school functioning. The need for schools to provide opportunities for middle adolescents to apply higher order thinking skills as well as teaching the necessary cognitive competencies became apparent. The need to develop emotional-, social and cognitive competencies that foster resilience gave rise to the development of the Resilience Enhancement Kit.

**Chapter five** provides an exposition of the Resilience Enhancement Kit and Resiliency scale to appraise, enhance and develop the resilience modalities and can be divided into the emotional-, social- and cognitive competencies. The role of the Educational psychologists within the school context is discussed giving an indication of how they empower the significant role-players in the school to address the needs of middle adolescents. The resilience modalities are discussed under the headings of emotional-, social- and cognitive competencies necessary for resilient functioning and the aspects that it incorporates. Particular attention was given to how the school can foster these resilience modalities. The **emotional competencies** encompass empathy, identification, management and communication of emotions as well as ego-resiliency. **Social competence** includes healthy positive relationships (making and maintaining friendships and working in groups) and a sense of self (self-identity, self-efficacy and self

perception). **Cognitive competence** consists of meta-cognition (thinking style, problem solving and decision-making) and future expectations (purpose, goals and aspirations). Illustrations of the Resilience Enhancement Kit and the description thereof were given. The age groups it is suitable for and the purpose and procedures were outlined. The assessment instrument (Resiliency Scale for learners) to ascertain the level of resilient functioning in middle adolescents as well as the Resiliency scale for teachers is outlined. The Resilience Enhancement Kit is discussed in detail and the preparations for each session as well as the visual aids to be used are provided. The sessions were developed to focus on the specific competencies that foster resilient functioning while keeping in mind the interests of the middle adolescents in order to ensure participation. The activities included role-play, modelling, dramatizations, music, group work, case studies and even puzzles. The sessions are divided into identifying the competency and related assets, managing and developing the competency and finally applying the competency to real life situations. The final session consist of a board game that is illustrated and its relevance discussed. The procedures and rules are also outlined. The effectiveness of the Resilience Enhancement Kit is discussed in chapter six.

**Chapter six** examines the research design. The introduction of this chapter relates to why research is undertaken in the school context. The research consists of a combined quantitative- and qualitative approach, or the dominant-less-dominant model. The two approaches are discussed for its relevance of this research. Inter-rater reliability is achieved by means of triangulation where the interpretation thereof is reviewed, and scrutinised by a registered psychologist familiar with the concept of resiliency and using more than one instrument (Resiliency Scale and open-ended question). Furthermore, the Resiliency Scale for learners is administered before and after the administration of the Resilience Enhancement Kit to ascertain if there was a change in the perceived level of resilience functioning in the middle adolescents. The research techniques for collecting data are comprised of open-ended question, Resiliency Scale for

teachers and learners and observations. The data analysis of the qualitative research were discussed as it related to the Resilience Enhancement Kit sessions. The research is based on a nomothetic foundation with an idiographic approach, which implies that many sources of data are used. In this chapter, there is also a discussion on the ethical considerations of research, such as the ethical acceptability regarding participants and the researcher and the ethical features regarding the research instruments. This chapter also includes a discussion of the results from the research.

### **7.2.2. Summary and integration of the results from the empirical research**

The Resiliency Scale for learners was administered to gain insight into how the middle adolescents perceive their level of resilience. The items of the pre-and post test (Resiliency Scale for learners) were compared to ascertain if the Resilience Enhancement Kit altered the middle adolescent's resilience modalities. The comparison was discussed under the headings of emotional-, social- and cognitive competence. The results were discussed according to gender with the aim of ascertaining whether there were differences in the way females and males view their level of resilience. The teachers were asked to randomly choose learners from the sample group and complete the Teacher scale with regard to those learners. The results thereof were compared with the learner's perception regarding their level of resilience. The data analysis of the qualitative research was also discussed as it related to the Resilience Enhancement Kit sessions. The factors identified by the learners that influenced their level of resilience in the open-ended question were discussed. The observations made by the researcher and replies from the evaluation forms filled in by the middle adolescents regarding the Resilience Enhancement Kit were also discussed.

### **7.2.2.1. Qualitative data analysis**

The influence of globalization and the way the media portrays social and cultural behaviour seems to have affected the South African middle adolescent. The imitation of American role models in the media could also affect the way that the South African middle adolescents deal with adversities and stressors in their lives.

The mind maps proved to be successful in teaching the middle adolescents the competencies and they were able to apply the skills although prolonged reinforcement is necessary to consolidate competencies. The use of colour and mind maps in geometrical forms to convey the skills necessary to manage the various resiliency competencies proved to be helpful to the middle adolescents. It was observed that the middle adolescents found the more complex blends of emotions difficult to identify and in the questionnaire regarding their emotions they chose the most familiar emotions to describe their feelings. Black middle adolescents especially enjoyed the activities such as role-play, dramatization and music that could be due to cultural differences. The group activities revealed that there were middle adolescents who naturally took the lead and others sat quietly and allowed them to make the decisions for them that could be contributed to temperament and group dynamics.

Middle adolescents seem unsure about their personal attributes (sense of self) and require assistance from the facilitator to function as a sounding board for their ideas and as a motivator in this time of identity formation. The middle adolescents were able to utilize meta-cognition and apply it to identify problems within the school as well as solving these problems. However, the problems identified were limited and very concrete and the facilitator needed to encourage the learners to think more extensively. This difficulty experienced by the middle adolescents' correlates with the views that the middle adolescents might not be functioning in the formal operational stage of their development and they have difficulty with solving problems and making decisions with the future goals in

mind. The session playing the board game to exhibit their competencies they obtained during the Resilience Enhancement sessions were very successful.

The factors identified by the learners that influence their level of resiliency included support of friends and family, having a sense of humour, scholastic success, sports, bonding with pets, listening to music and religion. However, three of the male participants did not feel they had any support systems and relied on alcohol, smoking cigarettes, playing war games and physical violence to make them feel that they had control over what happened to them. The observations and replies from the evaluation forms indicated that the learners enjoyed participating in games and acting activities. This is due to the competitive nature of these activities (games) where they can participate on a social level. The learners' responses indicated that they did obtain the necessary competencies as found in the Resilience Enhancement Kit. Critique given by the learners related to the dislike in sharing of personal emotions, the groups that argued at times and some of the learners that tried to disrupt the sessions.

#### **7.2.2.2. Quantitative analysis of the Resiliency Scale responses**

The female participants appeared to experience an increase in their competencies related to resilient functioning after participating in the Resilience Enhancement Kit. Six of the nine participants viewed themselves as very resilient and three participants view themselves as average in resilient functioning. Eight of the female participants showed a 4-17 point increase from the scores obtained in the pre-test to that of the post-test. One of the participants showed a 2-point decrease. The results indicate that the social competence (sense of self) is the primary area that the female participants experience a need for further development followed by the emotional (ego-control)- and then cognitive competence (future expectations).

The male participants appeared to experience an increase in their competencies related to resilient functioning after participating in the Resilience Enhancement Kit. Twelve of the sixteen participants viewed themselves as very resilient and four participants viewed themselves as average in resilient functioning. Twelve of the participants showed a 1-10 point increase from the scores obtained in the pre-test to that of the post-test. Four of the participants showed a 1-2 point decrease in their perception.

The results indicate that the competencies the male participants feel a need for further development is in the emotional competence (identification, management and communication of emotions; ego-control) followed by the social competence (sense of self). The results from the Resiliency Scale for learners revealed that half of the female participants compared to a third of the male participants viewed themselves as average in resilient functioning while the rest of the participants viewed themselves as very resilient after participating in the Resilience Enhancement Kit. This implies that the male participants appear to view themselves as more resilient than the female participants do. It was also found that there were some items identified by the female and male participants respectively that fell within the negative side of the scale that was gender specific.

The average mean of the emotional-, social- and cognitive competencies regarding the middle adolescents' scores in the Resiliency Scale were taken into account after the Resilience Enhancement Kit was administered and the post-test phase completed. The social resilience competencies are dominant in the female and male participants' lives. After administering the Resilience Enhancement Kit there was an increase of 6-points in this competency in the females and an increase of 4-points in the males. The second dominant competence in both the females and males' lives appears to be the emotional resilience competencies. There was a 3-point increase in this competency in



females and a 3-point increase in the males after administrating the Resilience Enhancement Kit. The competency in need of further development is the cognitive resilience competency. Although there was an increase after participating in the Resilience Enhancement Kit, the female and male participants viewed this as an area for growth. The female participants showed a 5-point increase and the male participants a 3-point increase in this competency.

The comparison of the teachers' scores with the learners' scores indicated that the learners experience themselves more resilient than the teachers view them and that the teachers' scores (24-point decrease) showed significant differences to the learners' scores. The teachers' answers did not show a significant deviation between the resilience modalities.

The correlation found in the answers provided by the middle adolescents in the pre- and post test after a period has elapsed is an indication of the reliability of the instrument and the proportional scattering of answers on the scale related to the differentiated aspects of resiliency modalities reflects the validity of the instrument. Therefore, the Resiliency Scale appears to be an appropriate instrument to measure the levels of resilient functioning in middle adolescents. The literature review and research yielded specific conclusions.

### **7.3. Conclusion**

#### **7.3.1. Chapter 1**

- ❖ There is a need for the discipline of Educational Psychology to work in a preventative way as well as incorporating the middle adolescents' strengths, abilities and assets to address needs and empower middle adolescents to rebound.
- ❖ The Educational psychologists can play an important role in assisting the significant role players in the school context to develop and enhance

resilience modalities because of their knowledge and expertise with this developmental age group.

- ❖ The growing learner population in the schools require the Educational psychologists to focus their efforts in collaboration with the role-players in the school context to address barriers to learning and development as well as being actively involved in curriculum development.
- ❖ Every middle adolescent has some inherent resilience modalities, but the learners' modalities need to be developed and enhanced through the guidance and nurturing of parents, teachers, psychologists and significant others.
- ❖ It must be kept in mind that resilient behaviour varies with each developmental phase and can vary on a continuum of less optimum resilience to optimum resilience.
- ❖ There is a need to appraise the modalities of resilience of the middle adolescent to ascertain their level of resilient functioning that could assist the teacher in addressing the needs of the learners and help them to rebound against the onslaughts of life.
- ❖ There is a need for the Resilience Enhancement Kit that could assist teachers and Educational psychologists in the school context to develop and enhance the modalities of resilience.

### **7.3.2. Chapter 2**

- ❖ Schools need to take the emotional state of middle adolescents into account and guide learners in managing their emotions because it has an influence on the receptiveness of learners to engage in new learning experiences and content.
- ❖ Emotions are often found as compound emotions or complementary pairs with different intensity levels and therefore it appears as a complex construct to comprehend.

- ❖ The role that parents, teachers, psychologists and significant others play in influencing the way middle adolescents perceive and manage their emotions are significant and therefore there is a need for informing adults on how to model appropriate expression and management of emotions.
- ❖ Due to the emotional changes in this developmental phase the enhancement and development of emotional competencies is necessary to help them manage their emotions and utilize them to rebound.
- ❖ The literature research indicated that assessment instruments measuring the emotional competencies necessary for resilient functioning are limited. The available assessment instruments currently in use are not developed for the South African population, and therefore the results might give a fallacious representation of the middle adolescent.

### **7.3.3. Chapter 3**

- ❖ It became apparent in the literature research that middle adolescents need the guidance of adults (parents and teachers) to assist them in developing pro-social and self-control skills that will enable them to form and maintain relationships as well as enable them to work effectively within a group.
- ❖ The influence of the media and a changing family structure leaves the middle adolescent vulnerable to learn and exhibit inappropriate behaviour. The need therefore arises for the Educational psychologists to work closely with families and schools to advise them on how to foster social competence in the children and adolescents to empower them to be able to withstand negative peer pressure and influences.
- ❖ The assessment instruments available to measure social competence is appropriate for assessing specific areas of social skills, however the unidimensional nature does not provide a holistic view of the learner and the instruments are not developed for the South African context.

#### **7.3.4. Chapter 4**

- ❖ Cognitive competence encompass more than just academic skills, and through the literature review it became apparent that the teachers and Educational psychologists should focus on developing the learner's meta-cognitive skills such as critical and reflective thinking, creative problem solving and informed decision making. These are skills necessary in resilient functioning. The activities and lesson content need to accommodate cognitive competencies to ensure continuous development thereof.
- ❖ Emotional-, social- and cognitive competencies are all interrelated and interdependent and must therefore be enhanced and developed together.
- ❖ The areas in the brain necessary for the development of cognitive competencies are still developing and teachers should foster neurological pathways through classroom activities that foster resilience.
- ❖ Learners should be encouraged to think about their future in order to help them set goals that could lead to internal motivation.
- ❖ The assessment instruments available to measure cognitive competence are limited and only focus on specific skills. There is a need for an instrument that could incorporate all the cognitive competencies necessary for resilient functioning that is appropriate for the middle adolescents of this country.

#### **7.3.5. Chapter 5**

- ❖ The aspects that make up the resilience modalities are often explored and applied in isolation. The Resilience Enhancement Kit amalgamates the emotional-, social- and cognitive competencies necessary for resilient functioning and puts theory into practice.
- ❖ The Resilience Enhancement Kit is designed to be used within the Outcomes based education philosophy of South Africa. The Resilience Enhancement Kit incorporates the various methods of teaching and application of new skills, attitudes and knowledge. Furthermore, the Resilience Enhancement Kit is

divided into identifying the competencies and assets, managing them, utilizing and applying them to everyday life.

- ❖ The primary focus of prevention research in Educational Psychology was aimed at younger children. However, the Resilience Enhancement Kit is focused on providing middle adolescents with the necessary competencies to rebound against adversities and risks.
- ❖ The Resiliency Scale for learners and teachers are designed to measure the aspects identified through literature that constitute resilience. The high correlation in the pre- and post test of the learners' results after an elapsed time period indicate that this self-report questionnaire is a reliable instrument in measuring resilient functioning in middle adolescents.
- ❖ The board game that focuses on resilient functioning is an instrument that could be used by teachers and Educational psychologists in the school context or in practices with regard to intervention or prevention. The non-threatening and enjoyable nature of the instrument seems to appeal to the middle adolescents.

#### **7.3.6. Chapter 6**

- ❖ Six of the nine female participants viewed themselves as very resilient and three participants view themselves as average in resilient functioning. Twelve of the sixteen male participants viewed themselves as very resilient and four participants viewed themselves as average in resilient functioning. This implies that the majority of middle adolescents view themselves as resilient. The results indicated that the male participants viewed themselves more resilient than the female participants. It must be kept in mind that these results rely on subjective responses and might not reflect an unbiased view regarding the level of their resilient functioning.
- ❖ The comparison of the results of the middle adolescents' responses in the pre- and post tests after administering the Resilience Enhancement Kit indicated that there was an increase in their perceived level of resilient

functioning. This implies that the Resilience Enhancement Kit appear to be successful in developing and enhancing the resilience modalities of middle adolescents.

- ❖ There appeared to be a significant difference between the teacher's perceptions regarding the learner's level of resilience compared to the scores of the learners themselves. The learners identified a need for teachers to be more involved in their support and in guiding them to be more resilient.
- ❖ This research indicated that there is a need to enhance the resilience modalities of all learners. The literature review indicated that due to the continuum on which resilience can be found, there are some modalities that the middle adolescents feel more resilient in (social competence) and others in which they have a need for further assistance (emotional competence and cognitive competence).

#### **7.4. Limitations of the research**

One of the limitations of the research is that the results were gained from a small percentage of the South African middle adolescent population. The research was also context specific (inner-city school) and the results may therefore not be generalised because the results may differ in other contexts (for example rural areas). It was found that the timeframe for the sessions was constricting because the learners needed more time to consolidate the new skills, attitudes and knowledge gained in the sessions as well as forming relationships. Two of the teachers did not complete the Teachers Scale in full and therefore the data could not be used in the research. Another area of concern was the absenteeism of five learners in the period the post test was administered and as a result, they could not be included in the research. The Resiliency Scale should not be considered as an instrument to assess the levels of resilience in middle adolescents and should be used in conjunction with other methods due to the subjective nature of the learner's answers. A word of caution must be given that due to the focus on group work in the Resilience Enhancement Kit, some of the

classes with larger learner populations might experience difficulties and therefore team teaching might be necessary to manage the groups effectively. The research illuminated specific areas in need of further investigation.

### **7.5. Recommendations**

The research yielded the following areas, which could be addressed in further research:

- ❖ The formative years of the middle adolescent is spent in the classroom and therefore a secure environment must be created by the school context where the significant role-players can provide the opportunities for modelling appropriate social behaviour as well as creating learning experiences for further development.
- ❖ The teacher could aid in fostering competencies by structuring and planning activities, assignment and lessons to incorporate competencies as well as integrating and utilizing the middle adolescents' innate abilities, interest, experiences, learning styles and prior-knowledge.
- ❖ Educational psychologists can be employed by the schools to identify middle adolescents who are potentially at risk and to work preventatively with them, their teachers and parents with the aim of enhancing resilience modalities.
- ❖ Educational psychologists can be employed to administer the Resilience Enhancement Kit to the learner population and in so doing assist the teachers who already have a comprehensive workload.
- ❖ The Educational psychologists can train teachers regarding how to administer the Resilience Enhancement Kit.
- ❖ Research should be undertaken to administer the Resilience Enhancement Kit to middle adolescents from other contexts for example rural areas, to obtain a holistic view of the level of the middle adolescents' resilient functioning.

- ❖ It is recommended that the Resilience Enhancement Kit should be administered over a year to ensure that the competencies are internalized and consolidated. The sessions can be expanded in this time to include more activities and reinforce new knowledge, skills and attitudes.
- ❖ The Resilience Enhancement Kit can be expanded to include more activities that will foster competencies. An area that the middle adolescent appears to need more assistance in is the cognitive competencies.
- ❖ It is suggested that the Resilience Enhancement Kit be incorporated as part of the Life Orientation curriculum to enhance and develop learners' resilience modalities.
- ❖ Educational psychologists can train parents to assist them to continuously enhance and develop the resilience modalities in children and adolescents at home as well.
- ❖ Further research into developing an objective instrument to measure resilience for the South African context is advised.



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**APPENDIX A**

Dear participant/ parent/ guardian

Adolescents are faced with an increasing amount of stressors and risks (such as peer pressure, exposure to substances, academic pressures etc.) that can have a negative impact on their wellbeing. It is important that they are empowered to deal with these adversities and are able to rebound from them. One of the critical learning outcomes from the Department of Education is to “*enable the learner to use acquired life skills to achieve and extend personal potential to respond effectively to challenges in his or her world.*” The principal of the school has given permission for research to be conducted in the Life Orientation period with the aim of teaching the learners emotional-, social- and cognitive competencies that will enable them to increase their resilience.

The learners will be requested to fill in a self-evaluation questionnaire (Resiliency Scale) to determine their perception of their level of resilience. The Resilience Enhancement Kit will be administered to the learners in ten sessions where they will be able to practice and learn the competencies necessary for resilient functioning. The Resilience Enhancement Kit contains non-threatening and enjoyable interactive activities such as role-play, demonstrations, games etc. The questionnaire will be re-administered to determine if the Resilience Enhancement Kit had an effect on their perceived level of resilience. The information gained from the research will be kept confidential but can be made available to you on request. The participants have the right to withdraw from the research at any time. The researcher (L. Kruger) and class teacher (Ms. Meyer) will be present during the research. The research will be used to ascertain if the Resiliency Scale and Resilience Enhancement Kit are suitable instruments to be used by the schools to assess and foster resilience in adolescents and perhaps be included in the curriculum in the future. I request that you allow your child to be part of the research and to complete the return slip and send it to the school as soon as possible.

Thank you for your co-operation.

Yours sincerely

**L. Kruger** (Educational Psychologist)

**Please complete the return slip and forward it to the school (L. Kruger)**

**Thank you for your co-operation.**

**Name of learner:** \_\_\_\_\_

I hereby **give** / **decline** permission for my child to participate in the research. I understand that the research will not disadvantage or harm my child in any way. I understand the purpose of the study, that the information will be kept confidential and that the research will be conducted within school hours.

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**APPENDIX B**

----- Original Message -----

**Charles C Thomas  
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2600 S. First Street  
Springfield, Illinois 62704

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Toll Free: (800) 258-8960  
Fac: (217) 789-9130  
E-mail: books@cctomas.com

**INVOICE**

Date: May 11, 2005

Invoice #: PR 512

name Levette Kruger company University of South Africa  
address \_\_\_\_\_ city Gauteng state \_\_\_\_\_ zip South-Africa  
phone 1541 fax \_\_\_\_\_ e-mail lkr@robotics2@hse.wvu.edu.za

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----- Original Message -----

**From:** Anita Hunter

**To:** 'Lenette Kruger'

**Sent:** Sunday, May 01, 2005 9:14 PM

**Subject:** RE: permission to use image

I would be happy to share that with you. There is other work I have also done on this subject if you would care to read it.

Dr. Anita Hunter

| <u>Name</u> | <u>Department</u> | <u>E-Mail</u>  | <u>Extension</u> | <u>Office</u> | <u>Position</u> |
|-------------|-------------------|--|------------------|---------------|-----------------|
| Anita       | School of         | <a href="mailto:ahunter@SanDiego.edu">ahunter@SanDiego.edu</a> | 7609             | HSN-          | Associate       |
| Hunter      | Nursing           |  |                  | 107           | Professor       |

---

**From:** Lenette Kruger [<mailto:lifecycle2@absamail.co.za>]

**Sent:** Sunday, May 01, 2005 4:33 AM

**To:** [ahunter@sandiego.edu](mailto:ahunter@sandiego.edu)

**Subject:** permission to use image

My name is Lenette Kruger, and I am a doctorate student at a university in South Africa. I am currently doing research on resilience and adolescents. I found the information in your article adolescent resilience interesting and very useful. I would like permission to use the diagram on continuum of resilience and information as part of my theoretical basis in my dissertation. I will provide the full references for where the diagram and information can be found as well as the author. I would greatly appreciate it if I were allowed to do so.

I can be contacted on [lifecycle2@absamail.co.za](mailto:lifecycle2@absamail.co.za)

Many thanks

Lenette Kruger

(Educational Psychologist)

-----Original Message-----

**From:** Robert Lehr [mailto:robert.p.lehr@verizon.net]

**Sent:** 03 April 2005 05:19

**To:** lifechoice2@absamail.co.za

**Subject:** Images

Lenette

I assume you are referring to the Centre for Neuro Skills brain images. You may use them but you must reference them as Centre for Neuro Skills, Bakersfield, California USA and my name. Glad there are useful to you.

Bob Lehr

-----Original Message-----

From: "Steve Mayer" <[Stephan.Mayer@oberlin.edu](mailto:Stephan.Mayer@oberlin.edu)>

To: "Lenette Kruger" <[lifechoice2@absamail.co.za](mailto:lifechoice2@absamail.co.za)>

Sent: Monday, May 02, 2005 8:26 PM

Subject: Re: reply for permission

> Dear Lenette,

> Certainly you have my approval to use that table. Your research sounds interesting and I wish you the best of luck with it.

> Stephan Mayer

>

**Associate Professor**

A.B., University of Southern California, 1976

Ph.D., University of Southern California, 1982

Department of Psychology

218 Severance Laboratory

Oberlin, Ohio 44074-1086

Phone: (440) 775-8067

FAX: (440) 775-8356

> --On Tuesday, May 03, 2005 7:29 PM +0200 Lenette Kruger

> <[lifechoice2@absamail.co.za](mailto:lifechoice2@absamail.co.za)> wrote:

>

>> Dear Prof Mayer

>>

>> I am referring to the image regarding the dimensional typology of temperament on pg 189. >> Thank you so much for getting back to me, I really appreciate it!

>>

>> Kind regards

>> Lenette Kruger



-----Original Message-----

**From:** McCaffrey, Patrick [<mailto:PMcCaffrey@csuchico.edu>]

Sent: 28 April 2005 03:59

To: Lenette Kruger

Cc: McCaffrey, Patrick

Subject: RE: permission to use images

Dear Lenette,

I am happy to give you permission. It's ironic that the South Africa Speech, Language, Hearing Association have taken four of my units (articles?) and put them on their on-line ceus (continuing education units) website for their members who have to pay to access them. While it is flattering that they should value my work they did not ask my permission. Thank you for asking. If you ever have questions please feel free to e-mail me.

Best regards

Patrick McCaffrey

-----Original Message-----

From: Lenette Kruger [<mailto:lifecochoice2@absamail.co.za>]

Sent: Wed 4/27/2005 1:41 PM

To: McCaffrey, Patrick

Subject: permission to use images

Hallo

My name is Lenette Kruger, and I am a doctorate student at a university in South Africa. I am currently doing research on resilience and adolescents. I found the information posted on the internet interesting and very useful. I would like permission to use some of the brain images and information as part of my theoretical basis in my dissertation. I will provide the full references for where the image and information can be found as well as the author. I would greatly appreciate it if I were allowed to do so.

I can be contacted on lifecochoice2 <<mailto:lifecochoice2@absamail.co.za>>  
[lifecochoice2@absamail.co.za](mailto:lifecochoice2@absamail.co.za)

Many thanks  
Lenette Kruger

----- Original Message -----

From: "**Ken Merrell**" <[kmerrell@uoregon.edu](mailto:kmerrell@uoregon.edu)>  
To: "Lenette Kruger" <[lifechoice2@absamail.co.za](mailto:lifechoice2@absamail.co.za)>  
Sent: Monday, May 02, 2005 8:59 PM  
Subject: Re: Permission to use table

> Lenette, I would be glad to provide permission for you to use the table from my book  
You have my permission to reprint this table. Please consider this e-mail as my formal  
notification to you.

>

> Best wishes,

>

> Kenneth W. Merrell

>

Ken Merrell, Ph.D  
School Psychology Program  
5208 University of Oregon  
Eugene, OR 97403-5208  
Phone and Voicemail: 541-346-2414  
Fax: 541/346-2897  
E-Mail: [kmerrell@uoregon.edu](mailto:kmerrell@uoregon.edu)

>>> Hello Lenette,

>> Thank you for your recent Permission request. In response to your request

>> please view the following Permission statement:

>> Permission Granted provided that material has appeared in our work without

>> credit to another source; you obtain the consent of the author(s); you

>> credit the original publication; and reproduction is confined to the

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Regards,

>> Bonita R. D'Amil

>> Executive Assistant/Office Manager

>> Permissions and Translations Manager

>> Office of Rights and Permissions

>> Lawrence Erlbaum Associates

>> 10 Industrial Avenue

>> Mahwah, NJ 07430

>> E-mail: [Bonita.D'Amil@erlbaum.com](mailto:Bonita.D'Amil@erlbaum.com)

>> Phone: (201) 258-2211

>> Fax: (201) 236-0072

>> For more information on LEA visit our website at: [www.erlbaum.com](http://www.erlbaum.com)

-----Original Message-----

**From:** Drs. Anita and **Robert Plutchik** [mailto:[proban@comcast.net](mailto:proban@comcast.net)]

**Sent:** 25 April 2005 03:29

**To:** Lenette Kruger

**Subject:** Re: Permission to use image

Please feel free to use the theory and illustrations of my circumplex model in your research. I would greatly appreciate receiving a summary of your findings when your work is completed.

Attached is a reprint of an article that my interest you.

Good luck,

Robert Plutchik

Dr. Robert Plutchik

4505 Deer Creek Blvd

Sarasota, FL 34238

Phone: (941) 925-7409

Cell: (941) 320-0206

Fax: (941) 925-0221

Email: [proban@comcast.net](mailto:proban@comcast.net)

-----Original Message-----

**From:** Rintoul, Betty E. [mailto:ber@rti.org]

**Sent:** 04 April 2005 08:59

**To:** lifechoice2@absamail.co.za

**Cc:** brintoul@nc.rr.com

**Subject:** Factors in Child Development

Dear Lenette,

I am the primary author of the literature review you are interested in using. I am glad for you to use my model in your dissertation. I am copying this message to my other email address – I use this one more now than the RTI address.

Good luck on your dissertation research!

Sincerely,

Betty Rintoul, Ph.D.

----- Original Message -----

**From:** Klaus Scherer

**To:** Lenette Kruger

**Sent:** Monday, May 02, 2005 4:38 PM

**Subject:** Re: Permission to use image

Dear Ms. Kruger,

there is no problem reproducing the material in your thesis as long as this is not commercially published.

Best regards, Klaus Scherer

Department of Psychology

Tel. direct : +41-22-379-9211

University of Geneva

Tel. secretary : +41-22-379-9215

40, Boulevard du Pont-d'Arve

CH-1205 Geneva

Fax : +41-22-379-9219

Switzerland

Email : [Klaus.Scherer@pse.unige.ch](mailto:Klaus.Scherer@pse.unige.ch)

Web page of the Geneva Emotion Research Group:

<http://www.unige.ch/fapse/emotion/welcome.html>

At 11:34 01.05.2005 +0200, you wrote:  
Hallo Prof. Scherer

My name is Lenette Kruger, and I am a doctorate student at a university in South Africa. I am currently doing research on resilience and adolescents. I found the information in your book *The nature and study of appraisal* interesting and very useful. I would like permission to use diagram on the appraisal process and information as part of my theoretical basis in my dissertation. I will provide the full references for where the diagram and information can be found as well as the author. I would greatly appreciate it if I were allowed to do so.

I can be contacted on [lifechoice2@absamail.co.za](mailto:lifechoice2@absamail.co.za)

Many thanks

Lenette Kruger

(Educational Psychologist)



----- Original Message -----

From: "**Phil Zimbardo**" <[zim@Psych.Stanford.EDU](mailto:zim@Psych.Stanford.EDU)>

To: "Lenette Kruger" <[lifchoice2@absamail.co.za](mailto:lifchoice2@absamail.co.za)>

Sent: Saturday, April 30, 2005 2:18 AM

Subject: Re: permission to use information//YES

>sure it is my pleasure

> wish you well

> Phil z

Department of Psychology, Building 420

Stanford University

Stanford, CA 94305-2130

Tel: (650) 723-7498

Fax: (650) 725-5699

[zim@stanford.edu](mailto:zim@stanford.edu)

> Dear Professor Zimbardo

>>

>> My name is Lenette Kruger, and I am a doctorate student at a university

>> in South Africa. I am currently doing research on resilience and

>> adolescents. I found the information in your book Psychology and life

>> interesting and very useful. I would like permission to use diagram on

>> the theories of emotion and information as part of my theoretical basis

>> in my dissertation. I will provide the full references for where the

>> diagram and information can be found as well as the author. I would

>> greatly appreciate it if I were allowed to do so.

>>

>> I can be contacted on lifchoice2 <<mailto:lifchoice2@absamail.co.za>>

>> @absamail.co.za

>>

>> Many thanks

>> Lenette Kruger