# 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, pariental 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 metacognitive 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 nonthreatening 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.