

INTRODUCTION

South African youth are experiencing a transition in their political, social and economic environment as the country struggles against economic uncertainty, the imminent threat of violence or actual violence, general social and racial tension, occupational uncertainty and general uncertainty about the future. Young people are also at high risk of contracting HIV/AIDS and sexually transmitted diseases and may be struggling with the social and cultural consequences of globalization.

Besides all of the above mentioned potential stresses and external factors to which the youth are exposed daily, developmentally they are going through their adolescent years which are characterized by rapid and significant changes in the physical, social, cognitive and emotional domains. According to Peterson *et al.* (cited in Washburn-Ormachea, Hillman and Sawilowsky, 2004) young adolescents have to adjust to changes of puberty, their emerging ability to think in more abstract and hypothetical ways, and increased involvement with peer groups in their striving towards identity formation and autonomy.

If adolescents as a group tend to feel, learn, think, or act in certain characteristic ways, if they present certain common problems of adjustment simply because they are all passing through the same developmental period, it requires all people who have to deal with an adolescent to acquire some understanding of the psychology of adolescence.

Without such knowledge parents and teachers, for example, cannot understand the perplexing adolescent phenomena such as adult-youth conflict, negativism, exaggerated conformity to peer-group standards, and resistance to accepting adult - approved values (Ausubel, 1977). Similarly, counselors, psychiatrists and clinical and educational psychologists have to be able to relate the behaviour disorders of adolescents to a revised norm of emotional instability that is characteristic of the adolescent period. As suggested in Ausubel (1977), if professionals fail to do this, they will be inclined to exaggerate the seriousness of such behaviour beyond its actual significance.

Findings reported in the literature indicate that there are sound physical, cognitive, affective and social reasons why stress in adolescents should be identified (Kruger, 1995). The main purpose of identifying such stress is so that parents, teachers and psychologists can assist the adolescent in dealing with whatever he / she is finding particularly stressful and may be struggling to cope with alone. By having a good understanding of the nature of stress in adolescents, one is more able to suggest methods of coping in ways that are meaningful and relevant to the stressed adolescent which will help him/her deal with the challenges and to avoid problem behaviours.

Most importantly, however, in order to be able to identify stress in adolescents, one needs a suitable identification method that accommodates the individual person's unique meaning, experience of, and involvement with stressors.

It appears from the literature that although a considerable number of questionnaires aimed at identifying stress are available internationally, no such instrument had been developed for specific application under South African conditions until Kruger (1992) devised the Adolescent Stress Identification Inventory (ASII) to specifically identify stress in South African adolescents. Results from Kruger's (1992) using the ASII show that it is possible to identify stress in adolescents by administering a self-assessment questionnaire or inventory. Secondly, according to Kruger (1992) by using the ASII an educator or therapist can determine, for example, whether an adolescent is suffering from stress caused by problems with his / her self-concept or by his / her relations with others.

This research project attempts to establish the efficacy of the ASII as an instrument to detect stress and identify the main causes of stress in a sample of South African adolescent girls. Kruger studied a group of male and female high school students who were from quite different backgrounds than those adolescents considered in this present research.

To this end chapter one of this report is devoted to a discussion of the literature on the "stress process" and how people, particularly adolescents are affected by the stressors in their lives. Following this review, Erikson's perspective on the psychosocial development of the individual is discussed in chapter two. The research data is

presented in chapter three using factor analysis i.e. societal demands, self-concept, future expectations, relations and positive experience to identify and compare the different stress factors amongst the grade 10 and grade11 girls who attend a private high school in Johannesburg. Using Erikson's psychosocial theory of development and the results presented in chapter three, a detailed discussion about the different stressors that characterize the period of adolescence is discussed further in chapter four. Finally, the implications of the present study are discussed critically and recommendations for further study are made.

CHAPTER 1

Literature Review

The term “stress” is in such common usage that, at first glance its meaning seems straightforward and in little need of definition. After all, we all know what stresses us, what it feels like to be stressed – or “stressed out”, in common parlance. Indeed the Oxford English Dictionary assures us that the term has been in use since at least the 18th Century. The problem, is of course that the term has been in such common usage that it has taken on a variety of meanings.

How one defines and conceptualizes stress will have profound consequences for the tools of measurement we create or select (Lazarus, 1990).

“Stress” first achieved technical importance in the work of the prominent physicist – biologist, Robert Hooke (Lazarus, 1993). Hooke was concerned with how man – made structures , such as bridges, must be designed to carry heavy loads and resist buffeting by winds, earthquakes and other natural forces that could destroy them. As described in Lazarus (1993) “load” referred to a weight or structure, “stress” was the area over which the load impinged, and “strain” was the deformation of the structure created by the interplay of both “load” and “stress”.

Although these usages have changed somewhat in the transition of the concept from physics to other disciplines, Hooke’s analysis greatly influenced early 20th century models of stress in physiology, psychology and sociology (Lazarus, 1993).

According to Aldwin (1994) physiologists conducting studies on animal stress are almost always interested in the particulars of stress as a physiological state, focusing on neuroendocrine and immunological reactions. With notable exceptions, however, psychologists and sociologists generally concentrate on the definition of an external occurrence and on the individual’s emotional reaction to it (Aldwin, 1994). In this usage, an individual’s cognitive appraisal of stress – the recognition of harm, loss, threat, or challenge must be present for any emotional or physiological reaction to occur.

The theme that survives in the modern definition is the idea of stress as an external load or demand on a biological, social or psychological system.

As can be seen from the foregoing, the study of stress has been plagued by an inconsistent and potentially confusing use of terms to denote the constituents of the stress process. Indeed, the differences between physiological and psychological stress are profound and although there are important overlaps between them, Lazarus, and Lazarus & Folkman (in Lazarus, 1993) suggested that psychological stress and physiological stress require entirely different levels of analysis.

Despite these different usages, for the purpose of this research project, psychological rather than physiological stress will be the main focus and therefore the term “stress” in this report will relate to psychological stress.

1.1 Definition: Psychological Stress

According to Lazarus (1990) psychological stress refers to a particular kind of relationship between person and environment and one in which the demands on the individual, tax or exceed the person’s resources. The stress relationship, as described by Lazarus (1990), is not static but is constantly changing as a result of the continual interplay between the person and the environment. For example, it reflects the conjunction of a person with certain motives and beliefs (personal agendas) with an environment whose characteristics pose harm, threats or challenges depending on the person and their characteristics. Therefore, what is stressful for one individual at one point in time may not be stressful for another individual or the same individual at another point in time.

Adolescence, for example is a period of life that is particularly stressful as it is characterized by rapid physical, social and cognitive changes (Baldwin, Harris and Chambliss, 1997). As adolescents mature, they experience emotional changes linked to perceptions of self and others (Ben-Zur, 2003). During the transitional period from childhood to adulthood the acute and rapid biological changes affect adolescent feelings as well as relationships with parents and peers which sometimes may even result in conflicts and emotional distancing. According to Dumont and Provost

(1999), some children adapt successfully and in some way are stimulated by these life changes whereas others experience adjustment problems.

1.2 Life Events versus Daily Stressors

Stressful life events encountered by individuals constitute an important dimension in the etiology and course of a variety of psychological and behavioural problems (Compas, Davis, Forsythe and Wagner, 1987) and physical and mental health problems (Baldwin, Harris and Chambliss, 1997). In fact, the notion that life events contribute significantly to the development of physical and psychological disorders has spawned a diagnostic category called “psychological factors affecting physical conditions” in the Diagnostic and Statistical Manual of Mental Disorders (Third Edition, Revised, 1987).

A number of research groups have adopted the life – events approach to stress (Kruger, 1992). The general purpose of the life events approach is to indicate that there is a temporal association between the onset of a disease and a recent increase in the number of events that require socially adaptive responses from the individual. Most researchers have availed themselves of the 43 item checklist of Holmes and Rahe (1967), (cited in Kruger, 1992) in its original form or in an adapted form to aid their understanding of the effect that stressful life-events can have on an individual’s life.

The Social Readjustment Rating Scale (SRRS) devised by Holmes and Rahe comprises a list of events arranged in order of gravity, rating the death of a spouse being given the highest rating (100) and minor law infractions the lowest (11). In addition to the above mentioned stress factors, they also incorporated fairly common situations that arise from familial, personal, occupational and financial events that cause a person to have to change or adjust to their new circumstances, or events which have been deemed as stressful (Kruger, 1992).

Dumont and Provost (1999) suggest that life events are a major source of positive and negative stress for adolescents, especially those who are depressive or anxious, who experience problems in social or academic spheres, and who have a poor self-esteem.

However, correlations reported between life events and mental health problems are consistent but generally modest (from .20 to .30; see Thoits, 1983 cited in Dumont and Provost, 1999). Although the relationship is high enough to convince researchers that stress may have causal significance in illness, according to Lazarus (1993), it is too low to have practical value.

As suggested by Lazarus (1993) there are a number of problems connected with the use of life-events scales. First, major life events are relatively rare, and somewhat inconsistently and inadequately represented in measurement scales for diverse groups of people such as children, adults and older people, as well as people with divergent socio-demographic and occupational characteristics. A solution has been to create special scales for different groups of people.

Secondly, as suggested by Lazarus (1993), life events scales focus only on changes in conditions of life; much stress, however, is connected with chronic or recurrent conditions, which Lazarus and his colleagues have termed “daily hassles”.

Third, the contribution made by the person to life events tends to be ignored, as for example when job loss or divorce is the result of a deliberate decision. Finally, as noted by Lazarus (1993) life events can have different significances for people with divergent cognitive and motivational agendas and coping resources and styles.

Lazarus (1993) believes that these problems all stem from an approach to stress that involve a minimum of theory and, with some exceptions, mostly leave out individual meanings and coping patterns.

Most stress research with adolescents has also focused on assessing the effects of major life events, such as death of a close family member or parents’ divorce (Ainslie, 1996). More recently however, due to the recognition that a majority of psychiatric problems in children and youth are attributable to smaller scale everyday problems rather than major crises (Ainslie *et al.*, 1996), the influence of ongoing stresses and strains has received increased attention. Research (for e.g. Ainslie *et al.*, 1996) has looked for other factors, such as the negative impact of small “daily hassles” on mental health.

Kanner *et al.* (cited in Dumont and Provost, 1999) has defined “daily hassles” as frustrations and irritants stemming from transactions with the environment such as homework, quarrels with friends and, so on. It is interesting to note that research by Compas *et al.* (1985); DuBois *et al.* (1992) and Greene, (1988) (all cited in Hee-og Sim, 2000) have all found that except for parental support, daily hassles alone, affected the level of the adolescents’ maladjustment the most. As with life events, the negative effects of these repeated micro events on health are well documented in pre-adolescents and adolescents, especially in their ability to adapt, and their ability to cope with anxiety or depression (Dumont and Provost, 1999).

The interest in “daily hassles” as an explanatory tool is growing rapidly for three main reasons. First, the questionnaires that assess daily hassles make a marked distinction between the objective experience (i.e., the frequency of each hassle) and the subjective experience (i.e., the perceived intensity of each hassle), whereas questionnaires on life events, especially those in line with the seminal work of Holmes and Rahe (in Dumont and Provost, 1999), focus mostly on the objective experience.

Secondly, according to Aldwin (1994), life events are relatively rare, whereas daily hassles are common and show a greater individual variance. Thirdly, as noted in Dumont and Provost (1999), the literature also suggests that daily hassles account for a greater percentage of the variance attributed to mental health problems, even when they are entered in the same regression equations as life events. This implies that daily hassles might be better predictors of the psychological health of young adolescents than are life events.

1.3 Effects of Stress

While the common assumption is that stress has negative physiological effects, it would be more accurate to perceive stress as having an activating effect, which at times can be positive as well as negative, depending upon various personal and contextual factors. According to Lazarus, (cited in Aldwin, 1994) emotional reactions

to stress generally refer to negative feelings such as anxiety, anger, and sadness, although shame, guilt, or feeling bored may also be considered stress reactions.

As mentioned previously, stress does not have uniform effects on all people (Aldwin, 1994). Elder (1974); Garmezy & Masten (1986); Rutter (1987); Werner & Smith (1992) (all cited in Aldwin, 1994) agree that vulnerability and resilience to stress is clearly affected by factors such as age, sex, social class, family dynamics, social support, temperament, self-efficacy, and coping skills.

1.4 Moderators of stress

1.4.1 Social Support

The role of social support as an example of a moderator of stress has received considerable attention in research. Studies by Barrera, Chassin, and Rogosch (1993); Greenberg, Siegel, and Leitch (1983); Wills, Vaccaro, and McNamara (1992) (cited in Gore and Aseltine, 1995) have consistently emphasized the role of family support in promoting psychological well-being, reducing problem behaviour, and more specifically, in buffering the emotional effects of stress. These and many other studies of stress and mental health have examined the importance of supportive resources that are embedded in different arenas of functioning – the family, peers and school.

The provision of emotional sustenance, tangible resources, information and cognitive guidance by supportive others as suggested by Wilcox (in Ainslie *et al.*, 1996) is thought to help individuals mobilize their psychological resources and enhance their ability to cope with stress. The shift in orientation from parental to peer relationships involves increased exposure to, and salience of, stresses in the peer world, and heightens the significance of experiences in this domain. (Gore and Aseltine, 1995)

According to Gore and Aseltine (1995), although the world of parents and family remains important, it becomes less closely intertwined with other areas of experience. A study by Burke and Wier (cited in Gore and Aseltine, 1995), for example, examined adolescents' evaluations of parents and peers as helpers, finding that high school students felt more inclined to talk with peers than parents about having a bad day, and were more satisfied with peers' help than parents' help in this situation.

Other studies where the beneficial effects of social support have also been observed in youth include those of Cohen (1987), Cohen and Wills (1985), Daniels and Moos (1990), Dubow and Tisak (1989), Johnson (1986) (all mentioned in Dumont and Provost, 1999). According to Bolognini (1992) (in Dumont and Provost 1999), when pre-adolescents reported low satisfaction with their social support, the probability of them having anxiety, depression or sleep disturbances is high. Burke and Wier (1978) and Compas *et al.*(1986) (cited in Dumont and Provost, 1999) found that in adolescents and young adults, low satisfaction with social support is associated with depressive or psychosomatic symptoms, anxiety and interpersonal sensitivity.

1.4.2. Coping with Stress

Closely aligned with the identification of stressors in adolescents is the question, “How do adolescents deal with their stressors or problems?”

The means of coping with stressful life events have received considerable research attention. Researchers (for e.g. Lazarus, 1993) have discussed broad categories of coping styles that ostensibly reflect successful coping.

Lazarus and Folkman (in Dumont and Provost, 1999) refer to coping as the cognitive and behavioral efforts that allow an individual to tolerate, escape, or minimize the effects of stress. This is done by altering one’s circumstances, and re-interpreting these circumstances to make them appear more favourable. This will enable a person to manage specific demands appraised as taxing or overwhelming. According to Lazarus and Folkman (cited in Lazarus, 1990) because coping is highly contextual, for the coping style to be effective it must change over time and across different stressful conditions.

Holahan and Moos and McCrae and Costa, (cited in Jorgensen and Dusek, 1990) note that people with good coping styles generally try to (a) deal directly with the stressor (e.g., consider multiple alternatives for problem-solving purposes) and (b) employ behavioural and cognitive strategies (e.g., try to see the good side of a situation) to maintain a sense of well-being and optimism.

Differences in conceptualization of stressors have led to a number of ways of classifying these different coping responses. One method distinguishes “problem-focused” from “emotion-focused” coping. Those coping strategies that are centered on problem solving are aimed at doing something to change the stressful situation whereas the coping strategies that are centered on emotion refer to strategies aimed at reducing psychological discomfort by simply avoiding the noxious stimulus without trying to modify the situation (Dumont and Provost, 1999). As noted by Griffith, Dubow and Ippolito (2000), emotion – focused efforts are directed at altering emotional responses to stressors.

Seiffge-Krenke (cited in Dumont and Provost, 1999) believe that in adolescents, the problem-solving coping mode is effective (seeking information or advice, accepting social support, making efforts to solve the problem), whereas the avoiding coping mode is ineffective (withdrawal, fatalistic attitudes, avoidance).

In a study by Fanshawe and Burnett (1991) in which they assessed school-related stressors and coping mechanisms in adolescents, the results indicated that there are four scales which validly and reliably assess the self-reported coping mechanisms used by adolescents to deal with general stressors. They were (a) negative avoidance, which involved avoiding stressors by smoking, drinking alcohol and taking non-prescribed drugs, (b) becoming angry and taking that anger out on others, (c) positive avoidance, which involves doing positive things not related to solving problems or alleviating the stressors, and (d) communicating with the family about how problems and stressors can be lessened.

Fanshawe and Burnett (1991) state that three of the four self-reported coping mechanisms, such as negative avoidance, anger, family communication, and positive avoidance which are measured by the Coping Inventory for Adolescents (CIA) are ineffective in overcoming problems and alleviating stress.

Understanding how adolescents cope with stress is extremely important for school psychologists and others concerned with both preventing and treating adolescent problems, because, according to Howard and Medway (2004), in addition to the sheer

amount of stress faced by adolescents, ineffective coping leads to maladjustment and other negative outcomes.

In order for adolescents to learn to cope with stress and adversity, Fanshawe and Burnett (1991) suggest that schools should develop programmes to assist students to solve their problems in an effective way, thereby reducing stress. Fanshawe and Burnett (1991) believe that this could be achieved by (a) teaching problem-solving and decision-making skills, (b) teaching relaxation, anger control and anger reduction techniques, (c) emphasizing the need to communicate with significant others about concerns and problems, particularly those who can make changes which will overcome the problem and alleviate its accompanying stressors, and (d) encouraging students to face their problems and stressors and actively to do something about them rather than avoiding them using ineffective means.

1.4.3. Achievement Orientation

Motivation for achievement has been less well studied as a moderator of stress than social support. However, achievement orientation has received considerable attention in the research literature as a trait that interacts with other variables to influence achievement barriers, attributions and outcomes (Ainslie *et al.*, 1996).

Burger (cited in Ainslie *et al.*, 1996) demonstrated a link between motivation for achievement and attributions regarding successes and failures. Burger found that those adolescents with a stronger drive for achievement were more likely to attribute their successes to internal stable sources, and their failures to unstable causes than were those adolescents with lower achievement motivation. Because issues related to success are likely to be heightened in a high school environment, Ainslie *et al.* (1996) anticipated that students with a high need to achieve would be likely to experience greater levels of stress in a variety of school – related tasks.

1.4.4. Self –Esteem

In the literature on stress, self-esteem has not been considered as often as coping or social support as a protective factor against stress. However, research (cited in

Dumont and Provost, 1999) has shown that individuals with high self-esteem or a high feeling of control will adopt active coping strategies focused on problems, whereas individuals with low self-esteem will adopt passive-avoidant coping styles focused on emotions. Research by Bettschart *et al.* (1994) and Rosenbaum-Asarnow *et al.* (1987) (both cited in Dumont and Provost, 1999) have shown that low self-esteem is related to depression and Houston (1977) (in Dumont and Provost, 1999) reported that low self-esteem is related to anxiety and unsuccessful coping strategies.

1.5 The effects of stress on adolescents

In addition to the “normal” developmental challenges that adolescents experience, they also encounter varying amounts of stress from everyday interactions associated with the adolescent development period. While there are common developmental tasks, adolescents deal with these in very idiosyncratic ways. A complex array of external and internal stressors confront adolescents daily in the high school situation (Moulds, 2003). According to Howard and Medway (2004), such stressors include peer and family conflicts, academic problems and school transitions, initiating and maintaining friendships, self-image and puberty concerns, and financial and work related concerns.

Children and adolescents negotiate these stressors with varying degrees of mastery and some are able to deal with their stress (Woodbridge, 1998). However, others who have not developed appropriate and successful coping skills may suffer from stress-related disorders and may express their stress in maladaptive and negative ways (Woodbridge, 1998). This may include substance abuse, affective disorders, violence, eating disorders, sexual promiscuity and a variety of other psychiatric conditions (Howard and Medway, 2004); as well as suicide attempts, depression and mental and physical illness (Woodbridge, 1998).

According to Basch and Kersch (cited in Kruger, 1992), adolescents in America are the only group whose mortality rate has gone up in recent years. These researchers also contend that adolescents suffer from an inordinately high incidence of disease, accidents, suicide, alcohol abuse, unwanted pregnancies and intense anxiety. Elkind (cited in Burnett and Fanshawe, 1997), reported that the incidence of stress-related

problems among teenagers in the United States had increased more than threefold in the last fifteen years. Although research done abroad cannot be applied directly to the South African adolescent, Yamamoto (in Kruger, 1992) observes that stress research done in the United States of America produces similar findings both for subpopulations in that country and for young people in other countries.

Acute stressors and minor daily vicissitudes both have been associated with adolescent maladjustment and the later development of dysfunction and psychopathology (Washburn-Ormachea *et al.*, 2004). A number of studies, according to Compas *et al.* and Wagner and Compas (both cited in Washburn-Ormachea *et al.*, 2004) have indicated that adolescent girls report more frequent and intense stressful events than adolescent boys. This was supported by a longitudinal study on adolescent depression, cited in Washburn-Ormachea *et al.* (2004). In this research, Peterson and colleagues found that young adolescent girls reported experiencing more challenging and stressful events than did boys. According to Peterson (in Washburn-Ormachea *et al.*, 2004) because girls experience more challenging and stressful events than boys, the girls are at greater risk for depressed affect by 12th grade which influences the strategies and coping styles the girls employ to deal with stress.

Excessive stress is harmful to the individual's health, including their affective, social and cognitive development (Kruger, 1995).

High levels of stress can lead to life-threatening complications such as abdominal ulcers, high blood pressure and asthma and according to Caudill and Carrington (in Kruger, 1995) excessive stress can also cause heart disease and cancer.

Physical stress symptoms include diarrhea, wetting pants, insomnia, intense itching, skin disorders, depression, anorexia nervosa, speech problems and the like, all of which affect the individual as stressors in their own right (Kruger, 1995).

In addition to its physical effects, stress also has a negative impact on the individual's cognitive development and functioning (Kruger, 1992). Stress symptoms such as anxiety, depression, lack of motivation, unrealistic goal setting, daydreaming and retreats from reality, fear of failure and success, lowered academic achievements,

underachievement, truancy and low self-esteem are all examples of stress symptoms that have been noted in Kruger (1995).

Excessive stress is not only harmful in the cognitive domain but the harmful effects can cause emotional or behavioural difficulties (Kruger, 1995). Some of the psychological and emotional problems that are associated with stress are fatigue, boredom, irritability, depression, unhappiness, suicidal thoughts, nightmares, resorting to denial and avoidance, poor eating or overeating, substance abuse, self-destructive behaviour and many more.

Crowder (cited in Kruger, 1995) suggests that if a person has a breakdown in interpersonal relations, experiences isolation and withdrawal, or is unwilling to accept responsibility, and fails at ordinary tasks they may be suffering from the social effects of stress. Kruger (1995) notes that the social development of the adolescent is negatively influenced by excessive stress, which may include the following: mood swings, low self-efficacy, constant irritability with people, maladaptive and inappropriate behaviours, running away from home, verbal and physical aggression, the feeling of being a target of other people's animosity, loss of sense of humour, social ineptitude and inordinate shyness.

Moulds (1992) conducted a study in Australia, on the manifestation of stress in high school students. Results from this study report that females (most noticeably in grade 11) who attend single sex schools use anxiety as a maladaptive stress response consistently more than males who attend single sex schools and students from coeducational schools. The anxiety, according to Moulds (1992) was associated with external and internal stressors associated primarily with school, including peers (e.g., teasing by classmates), home (e.g., perceived favorable treatment given to a sibling), and self (e.g., perception of poor ability, self-esteem). It follows that the findings of this study may be generalized to other school populations, however as suggested by Moulds, it needs further investigation.

There are growing concerns among parents, mental health professionals and adolescents themselves about the escalation of emotional and behavioural problems in secondary schools world wide (Moulds, 2003). An important task of schools is

therefore to prepare students to cope with future life events, including understanding the stress symptoms that they may experience later on in life. According to Omizo, Omizo and Suzuki, (cited in Kruger, 1995),

...in order for school counsellors, teachers and parents to assist children in coping with stress, we believe it is important to have a better understanding of what events are stressful to them and what the indicators are that they are under stress (pg. 197).

Various researchers have investigated the effects of stress on the lives of adolescents (e.g., Woodbridge, 1998; West *et al.*, 1982; Isralowitz and Hong, 1990), but most of them merely offer information on stress handling techniques or evaluate intervention strategies for stress prevention. It appears from the literature that the relation of both major life events and daily stressors with a range of symptoms and disorders has been well documented in adults (Compas *et al.*, 1987). However, studies of these relations among children and adolescents, although promising, have been more limited in their number and scope (Compas *et al.*, 1987).

As suggested in Compas *et al.* (1987) further examination of the nature and effects of stressful events during childhood and adolescence may depend in part on advances in the methods used to measure stressful events in younger age groups. Compas *et al.* (1987) lists the researchers (e.g., Johnson, 1982; Newcomb *et al.*, 1981; Swearingen & Cohen, 1985b) who have repeatedly pointed out the need for further investigation of the psychometric properties of measures of stressful events during childhood and adolescence. Fimian, Fastenau, Tashner and Cross (1989), are in agreement with this when they assert that "...before the impact of existing interventions can be assessed, psychometrically valid and reliable means of measuring student stress and burnout must be developed" (pg. 139)

In view of the foregoing it is obvious that in order to be able to identify stress in adolescents, the causes of stress reactions or their adaptational consequences, the researcher depends on an adequate measure of stress. As suggested in Lazarus (1990) measurement is also essential if we are interested in pathological or pathogenic stress, or in clinical intervention, for the purpose of treatment or prevention. These practical

concerns as well as theoretical ones have fueled and sustained academic and clinical interest in the stress process.

The transition into adolescence is considered to be a significant developmental period which brings with it numerous stressors associated with biological, cognitive and social changes, South African adolescents are growing up in a society in which fundamental changes have started to take place in the South African society. Since there was no standardised test in South Africa that had been specifically developed to identify stress in the adolescent, (Kruger, 1992), the Adolescent Stress Identification Inventory (ASII) was developed for this purpose. Kruger developed the ASII (Kruger, 1992) because of the limitations of existing instruments. She believed that by identifying the symptoms of stress and recognizing these as cries for help, teachers can help adolescents to develop appropriate coping strategies and by this means prevent further negative stress- related consequences (Kruger, 1995).

Kruger's (1992) research shows that despite the problems encountered in seeking to identify stress in adolescents and the advantages and disadvantages of the different approaches to the identification and measurement of stress, it is possible to identify stress in adolescents by administering a self-assessment questionnaire or inventory. According to Kruger (1992), it is also possible to determine how a person attributes meaning to, and experiences, a particular stressor by ensuring that questions put to a respondent are appropriately formulated.

Results from the study by Kruger indicate that the ASII can be administered to good effect, either in a group context or individually, to identify stress in adolescents (Kruger, 1992). The ASII questionnaire is further described as having a relatively high reliability and adequate construct validity. According to Kruger (1992) since the ASII's face-value and logical validity are adequate, panels of specialists have found the content validity to be adequate as well.

As can be seen from the foregoing, the ASII appears to be a valuable tool for identifying stress in South African adolescents. It is a useful instrument because it was developed specifically for South African conditions, in which variables such as diverse socio-cultural factors, the economic instability of the country and the

pervasive climate of violence and crime influences the lives of many young people. Such events and circumstances may have a major influence on identity development amongst the adolescents and the type of stressors that they experience.

Development during adolescence cannot be understood fully without considering development prior to adolescence and the developmental course thereafter. In the next chapter, Erikson's theory of psychosocial development is discussed in detail as the basis for understanding the nature and types of stress adolescents may experience.