

Psychosocial stressful life events and academic achievement among high school adolescents

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Abstract

The study examined the relationship between psychosocial stressful life events and the academic achievement among a sample of adolescent students. A Likert scale was used as the main instrument based on an adapted and modified Adolescent Inventory of Stressful Life Events Scale and Adolescent Coping Inventory Scale. Interviews were made to compliment questionnaire items. Two hundred and forty three (243) randomly sampled high school students, 118 males (48,6%) and 125 females (51.4%) served as subjects. They were between 17 and 20 years of age ($M=18.5$, $SD=0.90$). Of the 8 sixth form selected schools, 4 were urban and 4 were rural. The instrument items were reviewed to ascertain reliability. For boys' and girls' performance, parental social support, peer influence, health risk behaviour and the effect of self, the Cronbach's alpha's on the study were 0.69; 0.74; 0.78; 0.86; 0.71 respectively. Factor Analysis with a factor loading of 0.5 and above, and eigen values of 1 and above were considered valid and reliable for the instrument. The authors attended to all the sampled classes explaining the purpose and procedure of the study. ANOVA tests showed that; for parental social support, ($F_{4,df}=11.34$; $p<.05$; and $F_{3,df}=1.04$; $p>.05$), with lower levels of family cohesion acting as a source of stress. For Peer Influence, ($F_{2,df}=15.43$; $p<.05$), with peer relationships serving as both stressors and stressor buffers. Effects of high stress in boys was buffered by peer relationships and for girls by cohesive family relationships. For health risk behavior, ($F_{2,df}=11.98$; $p<.05$). The Self Effect had a weak mean negative correlation coefficient of ($r=-0.2031$) against academic achievement. It was concluded that psychosocial stressful life events are related to adolescent academic achievement.

Key Words: *Psychosocial, Stress, Adolescents, Life Events, High School.*

Introduction

Academic underachievement among Zimbabwean adolescents, especially girls, is a social concern amongst both educators and parents. High school students tend to underachieve as a result of several psychosocial stressful life events. Females tend to even perform worse than their male counterparts especially in Sciences (Barrera, 1981). Academic achievement of adolescents is of concern as it has been tied up to a host of problematic stressful consequences as a result of stressors including peer influence (Attar and Tolan, 1994), psychopathology (Perkins, 1982), abuse of mind altering substances and getting involved in health risk behaviours

(Lourdes and Bell, 2006). To some extent, the family has been seen to be a contributing factor to the achievement of adolescent student (Mpofu, 1997). By virtue of the fact that the former studies were carried out in some western cultural environments, (different from that of the authors), it was found to be challenging to study the effect of the same variables on a smaller scale in a different convenient environment set up.

The founder of adolescent psychology, Stanley Hall (1924), considered adolescence as a period of “storm and stress”. He likens it to a movement full of idealism and full of passion and suffering. Hall considers the stage as a turbulent transitional stressful stage. Some years later, Erikson in 1959 postulated the same when he referred to adolescence as a period of Identity Diffusion and Identity Crisis. Blos (1973), is theoretically known to have echoed the same sentiments citing that the period of childhood, which he considered to be a smooth developmental stage, is thrown into disarray, as the child enters the period of adolescence. No doubt adolescence is a time of fast physical developmental change. It seems that this fast developmental change also brings with it high stress amongst teenagers. Because of the rapid body changes, adolescents tend to be extremely self-conscious and find life rather excruciating and typically assume that everyone is always staring at them (Cohen, Burt, and Bjork 1987). Stress is the usual result of any rapid change, and rapid change is what adolescence is all about. Anna Freud (1958) wrote that adolescents appear to be suffering from psychoticism and neuroticism (which are both mild mental illnesses). Geleerd (1957) as in Cohen *et al* (1987) argues that he would feel greater concern for the adolescent who causes no trouble and feels no disturbance. These references indicate that the western adolescent appears to be stressed up as he grows up. Latter findings still concur to the former findings that the adolescent is stressed up as he develops and grows despite the differences in cultural environments where they may be found in (Mpofu, et al 2004).

Hall (*ibid*) argued that the storm and stress is a result of biological inborn tenets, therefore every adolescent in one way or another, has to pass through the phase. He puts across his theory, the Biogenetic adolescent theory. Cohen, Burt and Bjork (1987) concur when they argue that some adolescent stresses come from within- i.e. they have a biological cause. They also have various social causes, e.g. the family, the school, the peer groups and the society at large (Power, 2004). As a natural phase of ‘storm and stress’, Hall (*ibid*) argues that parents and educators should not interfere much with the adolescents because this phase of development would always come to an end during entry into adulthood. However, the educators and parents are not given guidelines as how not to interfere much. Naturally, no parent will be comfortable to watch a child misbehaving and consider it to be normal and

natural, latter alone, to hope for the disappearance of the misbehavior one day as the child gets into adulthood. Han (1990) argues that even the most well adjusted adolescent faces some form of stress in their adolescence.

Although this may be a long standing concern, satisfactory explanations continue to elude educators and psychologists as to why the adolescent appears to be in his own world of fantasy which is different from that of adults and why he/she appears to be stressed up (Kasayira and Chipandamira 2003).

The authors, however, having observed that the adolescents appear stressed up, attempted to find out if some sources of stress are related to academic achievement. The upper sixth student, in Gweru district, mean age of 18.5 was studied in an attempt to find out if ever there is any relationship, but not causation. The family social support has been identified as one psychosocial stressor (Han, 1990: MMW Report, 2004; Cauce, et al 1996). Some sub-tenets of this variable had to do with the socio-economic statuses of both parents, family cohesion, parental educational levels, the marriage statuses of parents, the number of children in the family, the family structure . Cohen et al (1987), found out that the failure to socially and financially support the child as a result of the parents' socio-economic status causes stress amongst children. Rhonda et al (2000), found out that the family status variables such as parental education, socio-economic status and family structure and family cohesion seem to be powerful correlates of achievement. They seemed to predict adolescent school success. Mpofu (1994) argues that patterns of socialization, such as being authoritative and authoritarian parenting styles, were found to be related consistently and robustly to achievement- related outcomes. We attempted to find out the relations of other known stressors on the achievement of adolescents.

The Context

Who is an adolescent from a Zimbabwean perspective?

In this study, adolescence is considered as a chronological period of about 13-21 years of age, however differing from culture to culture or individual to individual. From sociological perspectives, an adolescent is considered as someone who is in the transition period from parental dependence to self-sufficiency adulthood. From psychological perspective, an adolescent is perceived as someone who is in a 'marginal situation' in which new adjustments have to be made, namely those that distinguish child behavior from adult behavior in any given society. The Zimbabwean adolescent is usually considered someone who has come of age. This is a person who

has just gone past puberty stage. Biologically, if it is a girl, she is beginning to develop breasts and experiences menarche (first menstrual flow). For boys, the voice is beginning to break (become deeper in intensity) and sometimes has wet dreams. Pubic hair begins to show for both sexes. An adolescent, is then someone who is no longer a child but perhaps again, not yet an adult. It is generally used to refer to someone who has become more than a child, and from whom society has particular expectations (Chigwedere, 1997; Gelfand, 1979). As far as age is concerned, there is no agreement. Some Zimbabweans refer to adolescents as those in the age groups 12 to 16 years of age (Mapfumo, 1999; Gelfand, 1999), 13 to 15 years (Chidyausiku, 1991; and Mataure *et al* 2002). Other studies consider adolescence as a period spanning from 12 to 18 years (Bourdillon, 1998), and 12 to 21 years (Gelfand, 1979). The differences in the chronological age of dating amongst Zimbabwean adolescents, among these studies, in part, reflect the diversity in cultural practices that mark transition from childhood to adolescence in the Zimbabwean society. For example, Reynolds (1991) observed that among the Tonga of Mola (Northern Zimbabwe), had a relatively short period of adolescence as girl children in that community became adults from the age of 14 if they marry and bear children. Chidyausiku (1991) views adolescence as a period during which boys and girls go through initiation rituals to prepare them for life as adults. The VaRemba and Shangaan people of Zimbabwe hold these initiation ceremonies to mark the transition from adolescence to adulthood. They regard pubertal markers in males and females as evidence for selection for initiation (Malingwa 2003). Among the Maungwe clan chief Makoni, girls are tested for virginity and are given certificates of purity. The practice for testing for virginity just before marriage is both historical and cultural, however the concept of certification is rather a modern innovation to encourage adolescents to remain virgins until marriage (Mpofu, *et al* 2005). For the urban adolescent, all these practices are perhaps taboo to him/her, because she/he seems not quite knowledgeable about them.

Sources of psychological stress amongst adolescents:

Stress is a psychological issue, which affects emotions hence the term psycho-. No doubt, research has indicated that the major stresses are a result of one's interaction with his/her own environment. The stresses are socially, and environmentally related hence the term psychosocial. The other sources of adolescent stresses are biological, because of the sudden body changes resulting in some hormonal imbalances. This may result in some form of stress. However, some of the sources are from the various social spheres in which the adolescent operates in e.g. the family, the school, the peer groups, the society at large (Cohen et al 1987).

Facial pimples and one's body structure can be a source of stress to the adolescent. Every pimple, every unwanted curve, or lack of curves, can be a source of misery and stress to the adolescent, particularly for those who do not fit our culture's narrow concept of beauty on the part of the girl child (Mpofu, et al 2005). It has been observed that the Zimbabwean adolescent partly underachieves as a result of stress (Mandizha, 1998; Watkins, Akande and Mpofu 1996).

At school, stress may be caused by fear of several issues, e.g. fear of failing examinations, fear of failing in sports, fear of failing in competition for partners of the opposite sex, fear of the next carrier, etc. Such examples are possible sources of stress. Other adolescents would want to reduce such stresses by taking mind-altering substances such drugs as mbanje, alcohol, and glue sniffing which will in fact appear to worsen the situation. Peers were found to be either sources of stress or stress relievers (Chandler, 1985). In this study, 4 main sources of stressful life events under study were (a) parental social support (b) peer effect (c) health risk behaviours and (d) the self.

Under peer effect, some of the scale items include role played by peers in socialization, popularity with friends, conflict with friends, own type of dress, type of dress of best friend, hairstyles, role model of the adolescent.

Under health risk behaviours, the scale included things like; tobacco smoking, alcohol drinking, number of sexual partners, use of contraceptives etc.

Under self concept, some of the scale concepts were:

Sense of self-pity, lack of confidence, being worthless, loneliness, inability to speak in public, having no friend, wishing if I were not born, nobody loves me.

Objectives and hypotheses of the study

In this study, the five major objectives were:

- a) To find out if there was a difference in academic achievement between adolescent boys and girls in upper sixth classes.
- b) To find out whether the following psychosocial stressors are related to academic achievement of adolescents in upper sixth form
 - i) Parental social support
 - ii) Peer effect
 - iii) Health risk behaviours
 - iv) The self concept

The specific Null hypotheses of interest were:

1. There is no significant difference in academic achievement between adolescent boys and girls
2. There is no significant difference between parental social support and academic achievement of adolescents
3. There is no significant difference between peer influence and academic achievement of adolescents.
4. There is no significant difference between health risk behavior and academic achievement of adolescents
5. There is no significant difference between the self-effect and academic achievement of adolescents.

Appropriate inferential statistics were used to test all the hypotheses under appropriate degrees of freedom and appropriate overall alpha(α). The results were tabled and discussed here below.

Method

Participants

Four Gweru urban and four Gweru rural high schools were randomly selected. In each school an upper sixth class was randomly selected. The eight classes provided 243 participants (N=243). Of these 118 (48.6%) were males and 125 (51.4%) were females; (mean age = 18.5 years, S.D = 0.9).

Procedure

A survey pilot study was carried out. One other conveniently selected high school in Gweru urban was used. Twenty five (25) pupils in this class reviewed the items of the questionnaire to ascertain reliability. Factor Analysis (Varimax Rotation and Kaiser Normalization) was used to determine the suitability of the questions, which were to appear in the main study. Judging by the value of their factor loadings of 0.5 and above, and mean reliability ($r = 0.68$; $p < .01$), authors considered the adapted and modified Adolescent Inventory of Stressful life events and Adolescent Coping Inventory, reliable and valid. A new scale with 65 items was generated for use.

Questions for the 4 sections were mixed up to check for response acquiescence and/or response set amongst the subjects.

Number of subjects by school type: (N=243)

School type	Males	Females	Total
A- Urban	9	11	20
B- Urban	16	27	43
C- Urban	19	22	41
D- Urban	12	14	26
E- Rural	20	21	41
F- Rural	11	11	22
G- Rural	19	9	28
H- Rural	12	10	22
Grand Total	118	125	243

The researchers delivered and collected the questionnaires to the 8 schools during different days, but during normal class time. Every effort was made to stress participants' consent, confidentiality and anonymity. Just after collecting questionnaires, time was made available to interview 4 randomly selected students from each class. A total of 32 were interviewed, of these, 18 were girls and 14 were boys. The subjects highlighted their views on what they considered to be the main psychosocial stressors which possibly had effect on their academic achievement and no interview schedule was made for this. There was time for debriefing after data had been collected to all participants.

Instrumentation

The main instrument was the 65- question likert scale (LS) adapted and modified from the Adolescent Inventory of Stressful Life events and Adolescent Coping Inventory.

Four (4) main sources of stressful life events under study were (a) parental social support (b) peer effect (c) health risk behaviours and (d) the self. Under parental social support, some of the scale items were:

- i. Understands when I tell them (parents) things
- ii. Shows me I can trust them
- iii. Don't /doesn't pay enough attention to me.
- iv. Care (s) about my feelings
- v. Really understands me
- vi. Makes me feel wanted
- vii. Makes me feel good about myself
- viii. Knows the real me
- ix. Understands my feelings
- x. Are there when I need them
- xi. Likes to spend time with me
- xii. Really listens to me
- xiii. Let me know they care about me (Aneshensel, and Sucoff, 1996).

Under peer effect, some of the scale items include role of peers in socialization, popularity with friends, conflict with friends, own type of dress; type of dress of best friend, hair styles, role model of the adolescent.

Under health risk behaviours, the scale included things like, tobacco smoking, alcohol drinking, number of sexual partners, use of contraceptives etc.

Under self concept, some of the scale concepts were:

Sense of self-pity, lack of confidence, being worthless, loneliness, inability to speak in public, having no friend, wishing if I were not born, nobody loves me.

The instrument was factor analysed and found to be having a concordance of agreement index of ($r = 0.68$; $p < 0.01$) and valid with all statements having a factor loading of above 0.5 having used Varimax Rotation and Kaiser Normalisation during factor analysis. For performance of boys and girls, parental social support,

peer influence, health risk behavior, and self effect, the Cronbach's alphas on the study were 0.69:, 0.74:, 0.78:, 0.86:, and 0.71 resepctively. The statements were therefore both reliable and valid.

The researchers administered the questionnaires and carried out interviews. The LS completion and interviews were carried out during normal school hours. Permission for the students to take part in the study was obtained from the Zimbabwe Ministry of Education Sport and Culture. The participants' informed consent was obtained from the 243 eligible students (100%). The participants completed the questionnaires under supervision of the authors. The study comprised the pilot study (to develop the LS) and a main study. The study was carried out in Gweru district, both in urban and rural settings. 'A' Level schools were selected and upper 6th students were the participants. In order to avoid major time difference, the results were collected in one month. In each class, 4 students were interviewed.

Analysis of Data

Data were analysed using split-plot univariate repeated measures analysis of variance (ANOVA) and correlations. Within group effects of psychosocial stresses on academic achievement of adolescents were determined in two ways: (a) by having several variables in each group or whole group serve as its own control; and (b) compared to other groups. Correlation between variables, parental social support, health risk behaviour, peer effect and the self-effect by adolescent academic achievement was carried out in order to test the hypotheses. Pearson r was computed by the SPSS-X programme for Windows (Hull and Nie 1984). The overall alpha for statistical tests was set at .05 unless otherwise stated.

Results

The general descriptive statistical analyses are presented first as background to the presentations of findings for the specific research hypotheses.

Students' adolescent's academic achievement by respondent count by gender.

SPSS/PC+ (Hull and Nie 1984), was used to plot a line graph on student academic achievement (performance) by responded count. The 2010 mid-year academic results were used. A minimum of zero (0) points and a maximum of fifteen (15) points were the possible scores for each student, and a grade A being the best with 5 points and an E grade being the worst with 1 point.

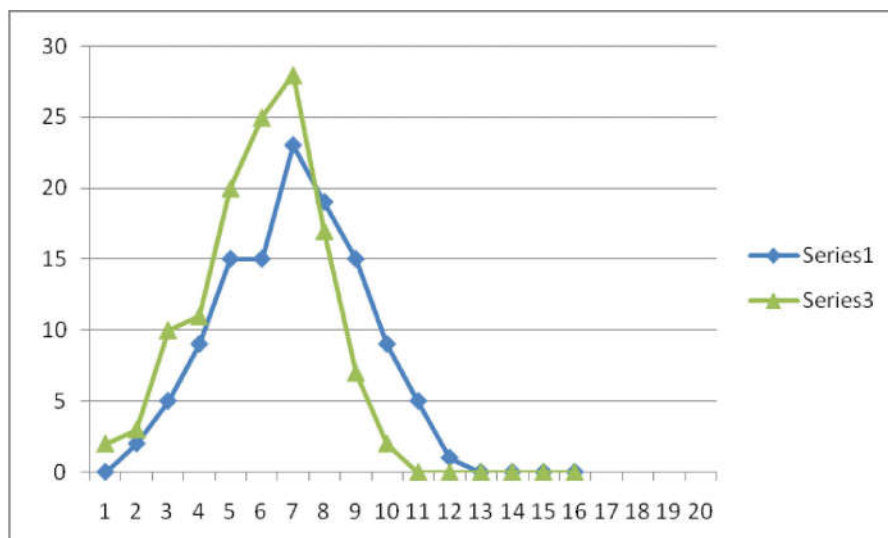
Table 1: Student's academic achievement by gender (N=243)

Exam 'A' level Points	Number of Boys	Number of girls	Total
0	0	2	2
1	2	3	5
2	5	10	15
3	9	11	20
4	15	20	35
5	15	25	40
6	23	28	51
7	19	17	36
8	15	7	22
9	9	2	11
10	5	0	5
11	1	0	1
12-15	0	0	0
	=118	=125	=243

The table above shows that students did not perform well. There is none above 12 points, however boys performed better ($15 > 9$ points; $7 < 2$ points) than girls ($2 \geq 9$; $15 \leq 2$ points).

The graph below depicts the same achievement. Figure (i) Student's academic achievement by gender:

Key 2: Number of students y –axis: Number of points x-axis



N=243

Series 1 – Number of Boys

Series 3 – Number of Girls

The line graph for girls depicts slight positive skewness with higher kurtosis (peakedness) at modal level of about 28 at 6 points. This signifies poorer academic achievement for girls than boys, who have an almost a normal Gaussian distribution curve and lower kurtosis but greater variance with more boys than girls having more than 8 points. There are numerous psychological reasons to explain such underachievement. The hypothesized stressors of parental social support, peer influence, health risk behaviours, and the self effect could be some of the reasons to explain poor academic performance in the 2010 midyear examinations of subjects studied.

The effect of parental social support on adolescent's academic achievement.

The second hypothesis under study was:

There is no significant difference between parental social support and academic achievement of adolescents. Analysis of Variance (ANOVA) test was carried out to verify this hypothesis.

Table 2 (a): Parental social support by adolescents' academic achievement (N=243)

Group	Sum of Squares (SS)	Degrees of freedom (df)	Variance Estimate (S) ² OR Mean Square	F-Test Value	Probability
High ses* and support	27.180	4	6.795	11.34**	P<.05
Low ses & support	21.280	4	5.320		
High ses and don't support	71.040	3	23.680	1.04	P>.05
Low ses and don't support	45.460	3	22.730		

*Ses- socio-economic status of parents ** p<.05

The Null hypothesis is rejected. The parental social support seem to show that at 5% significant level, for parents who support their U6th boys and girls at school, their children academically achieve higher ($F_{4df} = 11.34; p<.05$), irrespective of their socio-economic status. For the parents who don't socially support their children, their children academically achieve low, ($F_{3df} = 1.04; p>.05$), irrespective of their socio-economic status. Further direction of the relationship was shown by the computed positive correlation coefficient value of 0.7854 between adolescent's academic achievement and parental social support. It was noted from interviews that parents

serve as a primary coping resource in reducing stress, but for boys, they tended to turn more to peers than parents for stress reduction.

Table 2 (b): Correlation amongst some predictor variables (N=243)

Correlations	Parent's level of education	Academic achievement of child
Parent's social support	0.10831	+0.7854
Parent's level of education	1.0000*	-0.2013
Academic achievement of child	-0.0250	1.0000*
Gender	0.1391	0.6845**
Teacher qualification	0.1378	-0.0588

Key: * significant at .01 level ($p < .01$)

**significant at .001 level ($p < .001$)

Gender is seen to be related to academic achievement. (See Table 1 above for concordance). Adolescent girls seem to have more stressful life events than boys (Lourdes and Bell 2006). The interaction between parental social support and academic achievement also shown through the correlation between the natures of parents living with the adolescents.

Table 2 (c): Nature of parents living with the adolescent child (N=243).

Biological mother and father	190 (78%)
Biological parent and step parent	21 (9%)
One biological parent	27(11%)
Other relatives	5 (2%)

When variables of biological parents and step parent, one biological parent and any other relatives were simultaneously correlated with academic achievement, a significant moderate negative correlation coefficient of 0.4030 was obtained, whereas the variable of biological mother and father alone produced a moderate positive correlation of 0.3123. Although these variables were not initially

hypothesized, and their correlation values not very high, they seem to be of interest to the present study. Interview results (62%) showed that lower levels of family cohesion were found to be a source of stress amongst the subject studied, however its relationship (family cohesion) with high academic achievement was not determined.

Another demographic variable similar to parental socio-economic status is the parent's educational level. Its relationship with student's academic achievement was determined.

Table 2 (d): Student's academic achievement by parent's antecedent educational status.

Group	Sum of squares (SS)	Degrees of freedom (df)	Variance Estimate (S) ² Or Mean Square	F-test Value	Probability
Primary level or less	45.200	2	22.610		
Secondary level	20.620	1	20.620	10.40*	P<.05
Tertiary level	60.540	3	20.180		

The F-test value was 10.40, which is statistically significant at 5% significant level. This signifies that parental education is related to child's academic achievement.

Adolescents peer effects and influence on academic achievement

ANOVA (Analysis of variance) was computed to find out the effect of peers on academic achievement of adolescents.

Table 3: Effect of peer stressor on academic achievement of adolescents (N=243)

Group	Sum of squares (SS)	Degrees of freedom (df)	Variance Estimate (S) ² Or Mean Square	F-test Value	Probability
Males	51.680	2	25.840	15.43*	P<.05
Females	24.030	1	24.030		

The Null hypothesis, which says that there is no significant difference between peer influence and academic achievement of adolescents, is rejected at probability level of 5% ($F_{2,df0.05}=15.43$). Therefore, for both boys and girls, peer influence has

an effect on the performance of adolescents studied. From the interviews, it was established that peers serve as a secondary source in reducing stress. Boys tended to depend more on peers for stress reduction and girls tended to turn more to the parents to buffer their stress.

Effect of health risk behavior

The Null hypothesis, which implied no significant difference between health, risk behavior and academic achievement of adolescents, was rejected at 0.05 significant level. The table below shows the main sub-elements of health risk behaviour.

Table 4: Health risk behavior by adolescent academic achievement (N=243)

Group	Sum of squares (SS)	Degrees of freedom (df)	Variance Estimate (S) ² Or Mean Square	F-test Value	Probability
Unprotected sex	34.640	2	17.320		
Two or more sexual partners	18.940	1	18.940	11.98**	P<.05
Drinking & sex	61.200	3	20.400		
Sex once a week	29.960	1	26.960		

$$F_{2df, 0.05} = 11.98$$

ANOVA test showed ($F_{2df} = 11.98; p < .05$) rejection of the Null hypothesis at 5% level of significance. Health risk behaviours as stressors affect the academic achievement of the studied adolescents.

The effect of the self concept

The Self concept was correlated with the academic achievement. The following Null hypothesis was being tested:

There is no significant difference between the Self-concept and academic achievement of adolescents.

Correlation of some self-concepts was computed as shown below.

Table 5: Correlation among self-concepts variables.

<i>Scale</i>	<i>Pearson r</i>
Sense of self pity	-0.3020
Lack of confidence	-0,4310
Being worthless	-0.3921
Loneliness	-0.0421
Inability to speak in public	0.0039
Having no friend	-0.0058
Wishing if I were not born	-0.2690
Nobody loves me	-0.1794
	Mean $r = -0.2031$

A rather overall weak mean negative correlation of -0.2031 was found with a moderate negative relationship on sense of self-pity, lack of confidence and sense of being worthless as correlates of academic achievement (-0.30; -0.43; and -0.39 respectively). The Null hypothesis was rejected. Self-concept as a stressor is related to academic achievement for the subjects studied, although a weak mean negative correlate (0.2031) was established.

Discussion and Conclusions

Parental social support

The results of this study indicated that there is a relationship between parental social support and academic achievement of adolescents under study ($F_{4df} = 11.34$; $p < .05$; correlation $r = 0.7854$). The statistics did not reveal causation, it is spurious. Lack of parental social support is a stressful life event (Attar et al 1994). It would appear that most students live with their biological parents (78%, table 2 c above). However other studies say that about 80% of Zimbabwean adolescents have both living parents (population council, 1999). The presence of both parents in the family reveals stability. Their oneness in operations perhaps brings further cohesion to the psychological and emotional well being of the children. The central role of the family or parents, despite their socio-economic statuses or marriage status, is in the emotional upbringing of the adolescent. Failure to get appropriate provisions,

monetary or materially, tend to affect the adolescent psychologically. Most of the sub-items of the scale refer to the emotional development of the adolescent. They need to be cared for by parents. They need to be listened to and loved. Parents must fight hard to be emotionally close to their adolescents. Love and belongingness is a strong deficiency need according to Maslow's hierarchy of Needs theory.

There is perhaps more precious time being wasted by the adolescent being preoccupied by wishful thinking, especially if surrounded by peers who are financially and materially supported by their parents. Mpofu (1997) argues that the girl child may easily get tempted to prostitute in order to earn a living. About 60% of the girls interviewed argue that prostitution is socially unacceptable but if it can make one survive, then it is considered a noble cause. This is worrying considering the possibility of contracting HIV-AIDS disease.

Attar et al (1994) argue that failure by parents to support their adolescent children is highly stressful. Adolescent students tend to under achieve as a result of such stress (Power, 2004). All adolescents interviewed, agree that lack of financial or emotional support when one is at school stresses them up and it impacts negatively on their studies. The common direct result of lack of support from those interviewed was inadequate food or money to buy satisfying food. The majority said '*tinonzwa nenzara masikati*' (we feel hungry in the afternoon). Once anyone is hungry, one becomes stressed up and there is very little attention paid to academic issues. There is also a high likelihood of absconding classes. Such lack of attention and absenteeism from school will lead to underachievement. It would not be surprising that lack of parental support might force students to behave in all sorts of socially unacceptable behaviours, including absenting themselves from school, early pregnancies for girls, and school dropouts. Regardless of differences in urban and rural settings, lack of parental social support seems to be a common type of stressful life event amongst adolescents in the geographical areas studied.

Peer effect

The result of this study showed that peer effect is related to academic achievement of adolescents ($F_{2df0.05} = 15.43$). It is a generally correct observation that Zimbabwean adolescents spend most of their time with peers at school, church, clubs, discos, restaurants rather than with their families or alone. Cullinan (2003) reveals that peers play a significant role in the intellectual, emotional and social development of the adolescent, however, interview results showed that support from peers doesn't have much impact on reducing misbehavior. Students claim that parental support is more important than peer support. Alternatively, this may suggest that peers serve as a secondary coping resource, perhaps their help is solicited when

the family proves non-supportive. Likewise, any other third party who may appear to show concern/ love upon a distressed girl, for example, can be turned to for support, hence probabilities of early pregnancies and school dropping out for the girl adolescent. However, support from peers and support from family, serve as strong adolescent stress buffering factors (Han, 1990).

To be identified with a common group is typical for adolescents. This is true for both urban and rural adolescents. They want to study with peers for academic growth. They form Christian organizations as youth, perhaps for Christian growth or spiritual guidance and counselling services. For example, the Anglican church in Zimbabwe has the St Agnes Guild for girls and the St Peters Guild for boys, the United Church of Christ in Zimbabwe (UCCZ) has the Christian youth fellowship and the Roman Catholic has the Orders of St Simon Peter for boys and the Orders of St Mary for girls (Mpofu et al 2005). The Reformed church in Zimbabwe has the Varwi Va Jehova. The focus of these youth groups is partly to give identity to the adolescent (Mpofu, 1997). Such groups tend to minimize stress, frustrations and anxiety as the adolescent feels to be part of a larger group. Maslow (1954) argues that there is need for all humans to be loved and to belong to others (the love and belonging need). Likewise an adolescent will love to reduce stress by belonging to some groups. If it is in school, it might give some identity to that particular individual and perhaps might academically perform better, all things being equal.

School counsellors must be observant and identify lonely students and help them. Loneliness, is most likely to be stressful or is a result of stress among adolescents, who have not yet 'discovered' themselves.

The urban and rural adolescents seem to have different cultures. The urbanized adolescent from the middle to higher socio-economic classes (who are in the minority) may want to have a preference for Afro- American and Western type of music, dress, hairstyles etc. A minority of the males also braid their hair in imitation of African-American artists (search for identity). They also use more slang than any other group. They appear to give each other nicknames in slang, and prefer to communicate in English (Mpofu, et al 2005). Somehow this appears to 'satisfy' them, giving them hope, courage and identity, reducing depressions, tensions and stress. Those from the lower socioeconomic classes (the majority) prefer the local dress, languages and music.

The rural adolescent tends to make friends with same gender rather than the opposite sex peers (Mpofu, 1997). The preference for same gender peers may be a result of the strong gender-based education by the family, uncles, aunts at home, not to mention all concerned adults in the village. Peer pressure also discourages

social involvement with the opposite sex. However, the studied urbanized adolescents seem to have an avid preoccupation with their presentation to the opposite gender, and seeking romantic involvement. They study, walk and stay together with ease, perhaps as a result of urban socialization (as shown by the interviews carried out). Generally, peer interaction depends on common interest e.g. students of same academic prowess often make friends and study groups. Perhaps, this is why peer factor is important in academic proficiency.

Love and sexuality were observed to be other factors, which are an offshoot in their friendships and peer interactions. Zimbabwean adolescents may experience considerable ambivalence from their sexuality (Wilson and Marindo, 1989). On the one hand, adolescents may be involved in sexual liaisons for marriage or hedonistic pleasure (Gage and Meekers, 1994). About a third of a sample of Zimbabwean adolescents reported being involved in a romantic relations with a fifth of them having sexual experience (Mbizvo, et al 1997). Such conflicts between love and sexuality may have negative effects on the adolescent's academic achievement. Girls who tend to physically and sexually mature earlier than boys, tend to fall into the sexual trap earlier than boys, hence they tend to decline in their academic work as early as 'O' level. Table 1 shows that the studied adolescent girls in U6th classes are academically underachievers than their counterpart boys. This may tend to be stressful again on the part of the adolescent who all of a sudden finds herself entangled with crushes of forces against her wishes and will. In most schools, the girl child has no counselling facilities which further exacerbates her plight (Sherman and Basset, 1994; Woelk, Tromp and Mataure, 1997).

Growing up seems to be a tough business, especially for the adolescent. He/she needs perhaps the adult to guide and counsel in order to reduce stress and confusion during his/her developmental search for identity and academic competency.

Health risk behavior stressors

The hypothesis under study was: There is no significant difference between health risk behavior and academic achievement of adolescents. The hypothesis was rejected at 5% level of significance where F- ratio at mean 2 degrees of freedom was 11.98 ($F_{2df} = 11.98; p < .05$). Some of the items included under health risk behaviors were:

- Number of sexual partners, 2 or more
- Frequency of sexual intercourse, once or more per week
- Unprotected sex
- Frequent alcohol consumption (twice a week)
- Having sex in a drunken state

The study showed that health risk behaviours were related to academic achievement. Those (51%) who take alcohol at least twice a week are underachievers. This might imply that taking in of alcohol has an effect on academic studies. Taking in of alcohol implies less time for studies or assignments, or perhaps the assignments are done hurriedly. Such possible activities might lead to academic underachievement. Some of the health risk behaviours perpetuate the spread of HIV –AIDS (Kathryn et al 2004). The more an adolescent engages in health risk behaviours, the higher the probability of contracting HIV-AIDS. There is a higher probability of contracting HIV-AIDS, such that a student of that character is always under psychological trauma and stress if she/he suspects to be HIV positive. There is a high probability that one may underachieve academically.

People involved with multiple sexual partners have sexual intercourse with several partners either sequentially or concurrently (MacPhail and Campbell, 2002). Engaging in sex with multiple partners carries high risk of HIV-AIDS. In the urban environment, it would appear that the male teenager can be pressurized by peers to use sex as a way of showing or defining manhood. 33% of the interviewees concurred.

Both the rural and urban adolescents are interested in the physical aspects of sex (Debra, 2004). While these adolescents may be interested in the physical sexual relationships, it seems that they are not yet psychologically ready to bear the possible consequences, which go with such type of behaviours. Early pregnancies, sexual transmitted infections are common at this level. All these have negative impact on learning and achievement of students in schools and colleges (Shumba, 2001). It would then imply that both the girl and boy adolescent require all forms of empowerment and counselling services to enable them to functionally avoid the health risk stressful behaviours. The church must play a positive role through all its different organs. The youth clubs must also do the same. Open debates between the youth and adults must be encouraged.

In Zimbabwe, it is common to hear adults saying out that they go out to drink in order to reduce stress. Whether such statements are authentic or not, one is left bewildered and having difficulties to accept them unless perhaps through practice and experience. Likewise, the author observed the same statements from interviewees. They claim that they go out to drink partly for fun (41%) and also to reduce day- to-day stresses, (28%). Drinking is therefore partly regarded as a drug to reduce stress. Going by that notion, it would appear to signify that taking in of alcohol by the interviewed students, is partly for fun and also to reduce stress.

The seemingly stressful lives of adolescents pose a challenge to both educators and parents. In schools, perhaps constructive activities, which keep the adolescent

very busy, might assist them in overcoming idleness, which may therefore in turn reduce chances of involvement in health risk behaviours. Sporting is one area. HIV –AIDS sensitization programs and awareness activities could be another area. All these activities are an opportunity to have an outlet of emotions and to keep their bodies busy and healthy. While the risk of HIV transmission during sporting activities is small, and while most of the infections are usually contracted from outside the sports arena, great care must be taken to ensure that proper precautions against blood-borne pathogens are taken to minimize even the slightest chance of HIV-AIDS transmission in sports. Similarly, care must be taken to ensure that the proximity among the boys and girls during the time of training or performance is not used as an opportunity for mischief. In high schools, sports participation will help young people infected or affected by HIV, including perhaps orphans and other vulnerable adolescents, a safe and supportive space where they can ‘distress’ themselves. They can feel a sense of belonging (Maslow, 1954) and be protected from exploitation and harm. Those who excel in sports will be looked up to and regarded as heroes or stars, a fact that will further increase their self-worth.

The Effect of the Self

The concept of self was measured by some of the predictor variable items like:

- Self pity
- Wishing if I were not born
- Suicidal feelings
- Not being loved
- Lack of confidence
- Being worthless
- Loneliness
- Having no friend
- Inability to speak in public

The self-concept was found to be slightly related to academic achievement amongst the adolescents studied. The correlation coefficient was a weak one at -0.2031. The Null hypothesis was rejected. The implication is that adolescent students lack confidence in themselves (that is they have low self esteem). If one has low self-esteem, there is a greater or higher probability of poor classroom performance, however the current research finding does not imply causation but only a weak association. However, such persons who have a low self esteem, have also been found to be people of a weak character (Monodawafa and Gwede, 1996). These are the type of girls who have difficulties in saying NO, hence they can be taken advantage of by sugar daddies. They are easy to convince and lure, and hence act as easy prey to marauding sugar daddies (Shumba, 2001). As a result, sexual transmitted infections (STIs), unwanted early pregnancies and possible school failure and school dropping out are the common outcomes. Gorman-Smith et al

(2004), listed drug abuse, delinquency, early pregnancy and dropping out of school as maladaptive behavioural responses to stress. More girls (68%) have very little confidence and low self esteem than boys (32%) from the study carried out. This means that a boy adolescent tends to be more confident than the girl adolescent. Maybe, this is a result of cultural upbringing where the boy child is trained to be courageous as the future father and the girl being subservient and 'cool' as the future mother. However, such cultural training of being on the 'quieter' side might be partly responsible for the transmission of HIV-AIDS further exacerbating the low self-worthiness. Female teenagers were six times more likely to contract HIV as compared to same age boys (Munodawafa and Gwede, 1996; UNAIDS, 2002). The girl adolescent requires more empowerment, more encouragement and more higher self esteem to be able to acquire life skills to make them face the challenges of today's world.

Low self esteem breeds' low confidence, and low confidence breeds low motivation. Low motivation results in poor academic achievement. One who is academically incompetent seems shy in class. He/she doesn't want to participate because of lack of confidence and low self esteem. Such a vicious cycle of events leads to frustration, stress and academic underachievement.

Taking in of mind-altering substances tend to worsen the situation because of low reasoning ability. Most boys studied (62%) agree that mind-altering drugs (like alcohol, glue sniffing, cannabis) give one more confidence or high self esteem or reduce stress. Such harmful beliefs may be responsible for more stress amongst our adolescents. Lifetime use of mind-altering drugs by Zimbabwean adolescents is estimated at around 18% for alcohol, 9% for solvents and 4% for cannabis (Matongo, 2004; Eide and Acuda, 1996; Eide, Acuda, Khan, Aarow and Loeb 1997). School authorities have a big challenge in educating the youth, on the dangers of taking mind-altering drugs. The churches, youth clubs, the home as major socializing agents, must play a pivotal and critical role of correctly educating the boy child. Schools must have well trained counsellors, who will assist all the children, who may be having such psychosocial stresses to positively face the realities of life. Counsellors may offer advice, teach life coping skills, and provide material aid through other organizations. Above all, they will help the adolescent to overcome the emotional stress. Nsamenang, (2004) suggests that it is the adolescent's perception of support that actually determines the extent to which the effects of stress are reduced. As humans, we always need someone to show concern and love in our lives, in times of sorrow, and in times of emotional distress, to cheer us up and raise hope in our lives, and to demonstrate the purpose of living. All concerned should demonstrate unconditional love and live a life worth imitating to the adolescent. All the bid independence and search for identity, is perhaps a search for those who could love unconditionally, who could perhaps be regarded as role models to the adolescent.

Adolescents must be able to rise up to the challenges of life, identify themselves, their roles in the society as possible leaders of tomorrow.

Limitations of the Study

The findings in this report are subject to multiple limitations. First, the sample studied represented only one district, therefore external validation may not likely apply to all adolescents. Secondly, these data apply only to adolescents who attended U6th in 2010 in the particular schools studied. Therefore the students are not representative of all persons in this age group. Thirdly, the extent of under-reporting and or over reporting of stressful life events cannot be determined, although instrument items demonstrate good reliability. Future investigations should incorporate a large representative sample of adolescents in high schools. Clinical interviews on the effect of stressors on academic achievement could be carried out. Furthermore, assessments of other unhypothesized variables e.g. school social support, community social support, extended family (e.g. uncles) support as well as other related variables would be valuable.

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