Contents lists available at GrowingScience

Management Science Letters

homepage: www.GrowingScience.com/msl

An empirical study on managing stress in guided schools to increase educational skills

Leila Zeinalian*

Bachelor of Social Science Research - Islamic Azad University-North Tehran Branch, Tehran, Iran

ARTICLEINFO

Article history: Received March 19, 2012 Received in Revised form April, 25, 2012 Accepted 29 May 2012 Available online June 3 2012

Keywords: Stress Guided schools Coping with stress Teenager's stress

ABSTRACT

The primary objective of this paper is to study the impact of stress on educational school-children who are enrolled in guided schools. Teenagers are normally facing with stress and feelings and when the level of stress increases, they may face with problems, which would become more serious as they get older. In this study, we perform a standard stress relief program (CS-R Coping With Stress-Revised) and try to reduce the burden of stress among 1240 students who attended guided schools. We split the people into two groups of experiment and witness and performed the study among one group. Before the exam, there was no meaningful difference between their average markings but after performing the exam, the average marking of the experienced students was increase by 0.53. The results clearly indicate that it is possible to make significant change on students' personal characteristics.

© 2012 Growing Science Ltd. All rights reserved.

1. Introduction

Many guided school students are experiencing unprecedented levels of school-based stress. Stress can be created through different things and if there is no good medication, it could end up having depression and other deceases. Therefore, it is necessary to find the roots of stress and prevent them as much as possible. There are literally various research studies associated with methods and procedures on reducing stress among school children. Roesch (1979) preformed a comprehensive study on relationship between degree of stress and coping preferences among elementary school principals.

Allison (1997) identified the most common coping techniques utilized by public school principals to ameliorate the effects of stress and clustered these coping techniques into interpretable and meaningful coping categories. He determined whether there were any differences in the number of coping techniques most frequently utilized by principals or not. He discovered the relationship between coping items on the coping preference scale with total stress scores on the administrative stress index. Finally, he compared and contrast principals' coping responses in terms of four selected

^{*} Corresponding author. Tel: +98912 618 6643 E-mail addresses: l_zeinalian@yahoo.com (L. Zeinalian)

personal and environmental variables including administrative level, gender, professional education, and age.

Smith and Prior (1995) made an assessment on stress resilience among 81 school-age children, where there were 32 families acknowledging severe psychosocial stress. They reported that the level of maternal stress and individual differences in child intelligence were associated with academic adjustment, but the child's sex, age, ability, and self-concept were not significant discriminators of behavioral adjustment.

Falkum et al. (1997) used the factor structure of the Ways of Coping Checklist (WCCL) developed by Folkman and Lazarus and tried to re-examine factors associated with eight various measures of health and stress in a large representative sample of Norwegian physicians (N = 1030). They concluded that accommodation and positive thinking are more productive methods of coping when the source of stress is not likely to be removed or significantly weakened by individual action.

Murberg and Bru (2007) studied the impact of neuroticism and perceived school-related stress in somatic symptoms among a sample of 327 (167 females and 160 males) students in two Norwegian junior high schools. The results revealed that the impact of neuroticism on somatic symptoms could be overestimated, and the effect of stress may be underestimated if neuroticism, stress and somatic symptoms were measured at the same time. According to their studies, both neuroticism and perceived school-related stress were found to be substantially associated with somatic symptoms.

Hennig-Fast et al. (2009) performed an investigation on After facing traumatic stress: Brain activation, cognition and stress coping in policemen. They compared ten traumatized male police officers compared with demographically matched non-traumatized officers (n = 15) on associative memory by using a block design paradigm. They reported less BOLD activation in the hippocampus, parahippocampal gyrus and fusiform gyrus in the trauma group when compared with the non-trauma group during encoding.

Yazhuan et al. (2010) identified the major factors of stress among high school chemistry teachers in Shaanxi province in China. They surveyed 101 chemistry teachers from 15 high schools in Shaanxi province in China with a self-administered questionnaire at a return rate of 72.14%. The results indicated that among the 19-item sources of stress, investigated through factor analysis, resulted in five distinct dimensions of perceived stress: teaching workload (34% common variance), school system (11% common variance), social treatment and demands (7% common variance) and self-development demands (6% common variance), school hardware facilities (5% common variance), the top three sources of stress perceived by these chemistry teachers in descending order of mean scores: 'social treatment and demands', 'parental demands', and 'self-development demands'. Measures such as increasing teachers' salaries, improving schools' humanistic environment and school hardware facilities, creating more opportunities for the development of teachers could be given to mitigate stress of high school stress of high school at Shaanxi province in China.

Matsuoka (2010) discussed on a relationship between restoration from mental fatigue and stress reduction and investigated 101 public high schools in southeastern Michigan to investigate the impact played by the availability of nearby nature in student academic achievement and behavior. His study disclosed consistent and positive relationships between nature exposure and student performance. His survey also indicated that large expanses of landscape lacking natural features were negatively associated with scores and college plans. The featureless landscapes included large areas of campus lawns, athletic fields, and parking lots.

Bagana et al. (2011) investigated the effect of optimism and exams' anxiety on high school students' self esteem. They invited 200 students from four high schools from Bucharest, Romania in a study

where 100 facing an upcoming national examination (class 12) and 100 with only their regular exams (class 10), 82 male and 118 female, aged 15 - 19 years. They collected the necessary data with three self-rating questionnaires assessing optimism, self esteem and anxiety. They reported that school counselors could develop programs aiming to increase students' abilities to keep their self-esteem even in uncertain and adverse conditions.

Shahmohammadi (2011) examined high school student's coping with stress more specifically those students who attend at 11th and 12th grade. She studies the academic anxiety among the students, to analyze stress among the students and to understand how students cope with such issues. She chose a sample of 100, 11th and 12th class students from government secondary schools located in Tehran and gathered necessary personal information of respondents. She also collected data on coping strategies, stress and academic anxiety.

The stress and coping strategy questionnaire included a series of questions about stress and coping strategies was administered to a total of 90 (90%) students. She reported that the percentage of distressed secondary students was 26.1%. There were many reasons for creating stress and top ten rank of stressor among students were afraid of not getting place in tertiary education, examinations, too much content to be learnt, difficulty in understanding subject that have been learnt, too much homework, and school timetable was too packed. All of the stressors were associated with the academic matters but the rest of the top ten stressors were rated as causing moderate to high stress.

Mahmoodi (2011) investigated the relationship between the cooping styles with stress and marital satisfaction among female students and normal population of women in Tehran, Iran. She used a sample of 100 women from the city of Tehran and performed a survey using questionnaires of coping styles with stress (CS-R) and marital satisfaction (ENRICH). The results of the study showed that there were relationship between coping styles with stress and marital satisfaction and the women who have used problem-focused style, experienced more marital satisfaction. In addition, the same relationship was observed between coping styles with stress and marital satisfaction in none unify student. The results of her study also indicated that the amount of marital satisfaction in normal population of women was not different from that of female student, but the coping styles in these two groups were different from others.

Grayson and Alvarez (2008) studied components of school climate in terms of parent/community relations, administration, student behavioral values and evaluated their impact on the core burnout dimensions of depersonalization, emotional exhaustion and feelings of low personal accomplishment. The study also considered some personal characteristics including gender, age, years of teaching experience in addition to teacher satisfaction, and teacher-rated school climate, which would forecast resultant levels of teacher stress and burnout from 17 rural schools in southeastern Ohio. They reported that various aspects of school climate were associated with each of the three primary burnout dimensions and the inverse relationship between school climate and burnout was mediated by teacher satisfaction levels for both emotional exhaustion and depersonalization dimensions.

In this study, we survey different factors creating stress on people's personal lives. The organization of this paper first explains the important factor and then it performs an empirical investigation to find out whether the implementation of a standard program could help reduce the stress from these people.

2. Management of stress

This is a method for discovering different reasons creating stress and providing remedy for them. There are different methods to reduce stress and some of them are discussed in this section,

2.1 Awareness

One of the most important methods for managing stress among people is to increase awareness and detect the reasons for stress in its early stages. In this method, it is possible to increase the awareness on necessary reasons for having stress and try to prevent any possible stressful incidents. Normally, it is possible to write a memo on all important stressful events in a five consecutive days and express details such as occasions, feeling, time, etc.

2.2. Forecasting

Forecasting stressful events is another method to control and imagine any issue, which could create stress among people and possibly reduce the immediate consequences. In fact, when a stressful even can be predicted in advance, it is possible to reduce the burden of stress, substantially.

2.3 Prevention

There are many cases where we can prevent stressful events in our lives. Fighting against stress is like keeping money in bank to ease of our mind. When we have too much stress in our lives, it means we have cashed much money from our bank accounts and when we have low level of stress, it means that we are successful in managing stress in our lives or cashed less from our bank accounts. Note that people face with financial crises, their health conditions will be also jeopardized and stress has the same role on people's personal lives.

2.4 Stress assessment

Stress is not created by the work we accomplish but it is created because of efforts we put into the work. Sometimes, when a person goes to bed to sleep, he/she worries whether the efforts put into was sufficient and whether he/she could sleep enough to continue the work. This could simply create Rush disease and it is important to make a good assessment on such event and prevent it.

2.5 Assertiveness

We should defend our right as much as we respect other people's rights. The secret of assertiveness is to have self steam and this could build a bridge between people's real emotions and peace of mind. Many people are willing to accept other people's responsibilities for no good reasons in an attempt to attract the people's satisfactions and this normally adds more stress on them. A survey shows that over 72% of men and 40% of women are in constant stress and do not do anything to reduce the stress.

In addition, there are many studies indicating that when teachers' abilities and teaching skills increase students' learning will also increase, subsequently.

3. Case study

In this paper, we have performed an empirical study among female students aged 12 to 15 who were attending guided schools in city of Tehran, Iran. The objective was to see any advances in their final exams because of applying some medications. We used a standard questionnaire called coping with stress-revised (CS-R) (Swent, 1983; Sutherland & cooper, 1990). The check list includes 72 questions in 18 different categories. We have used a simple sampling technique, which includes 1240 students who were randomly chosen. We have gathered the filled questionnaires from 1240 and found out that 120 dilled questionnaires were found unsuitable and they were set aside. We have divided the remaining students into two groups. The average scores of the witness people were 16.76 and two

groups of our survey had no meaningful differences in terms of their average marking during the first term of study. The average scores for the witness and experiment groups were 16.38 and 15.85, respectively and this shows that the average score was increased for about 0.53 after managing stress among a group.

5. Conclusion

In this paper, we have presented an empirical study to measure the effects of stress on educational performances. We have studied the impact of stress on educational school-children who were enrolled in guided schools. Teenagers are normally facing with stress and feelings and when the level of stress increases, they may face with problems that are more serious when they get older. In this study, we executed a standard stress relief program (CS-R Coping With Stress-Revised) and attempted to reduce the burden of stress among 1240 students who attended guided schools. We split the people into two groups of experiment and witness and performed the study among one group. Before the exam, there was no meaningful difference between their average markings but after performing the exam, the average marking of the experienced students was increase by 0.53. The results clearly indicated that it was quite possible to make significant change on students' personal characteristics.

Acknowledgment

The authors would like to thank the people and officials who helped us gather the necessary data. We are also grateful to anonymous referees' insights on earlier version of this paper.

Reference

- Allison, D.G. (1997). Coping with stress in the principlship. *Journal of Educational Administration*, 35(1), 39-55.
- Bagana, E., Raciu, A., & Lupu, L.(2011). Self esteem, optimism and exams' anxiety among high school students. *Procedia Social and Behavioral Sciences*, 30, 1331-1338.
- Falkum, E., Olff, M., & Aasland, O. G. (1997). Revisiting the factor structure of the ways of coping checklist: A three-dimensional view of the problem-focused coping scale. A study among norwegian physicians. *Personality and Individual Differences*, 22(2), 257-267.
- Grayson, J.L., & Alvarez, H.K. (2008). School climate factors relating to teacher burnout: A mediator model. *Teaching and Teacher Education*, 24(5), 1349-1363.
- Hennig-Fast, K., Werner, N.S., Lermer, R., Latscha, K., Meister, F., Reiser, M., Engel, R.R., & Meindl, T.(2009). After facing traumatic stress: Brain activation, cognition and stress coping in policemen. *Journal of Psychiatric Research*, 43(14), 1146-1155.
- Mahmoodi, F. (2011). The relationship between the coping styles with stress and marital satisfaction and their comparison among female student and normal population of women in Tehran. Procedia Social and Behavioral Sciences, 30, 1301-1302.
- Matsuoka, R.H. (2010). Student performance and high school landscapes: Examining the links. *Landscape and Urban Planning*, 97(4), 273-282.
- Murberg, T.A., & Bru, E. (2007). The role of neuroticism and perceived school-related stress in somatic symptoms among students in Norwegian junior high schools. *Journal of Adolescence*, 30(2), 203-212
- Roesch, M.B. (1979). A study of the relationship between degree of stress and coping preferences among elementary school principals. Doctoral dissertation, George Peabody College for Teachers of Vanderbilt University. *Dissertation Abstracts International*, 41(2), 488.
- Smith, J., & Prior, M. (1995). Temperament and Stress Resilience in School-Age Children: A Within-Families Study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 34(2), 168-179.

Shahmohammadi, N. (2011). Students' coping with Stress at high school level particularly at 11th & 12th grade. *Procedia - Social and Behavioral Sciences*, 30, 395-401.

Sutherland, J. V. & cooper, L, G. (1990). Understanding stress interactions. New York.

Swent, B. (1983). How administrators cope with stress. Theory into Practice, 22(1) 70-74.

Yazhuan, L., Qing, Z., & Yugui, Z. (2010). An investigation into sources of stress among high school chemistry teachers in China. *Procedia - Social and Behavioral Sciences*, 9, 1658-1665