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EXAMINING THE IMPACT OF STRESS ON SRI LANKAN COLLEGE STUDENTS: INSIGHTS INTO COPING STRATEGIES

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Abstract

The Sri Lankan education system is structured into three key stages, spanning 13 years, starting from primary school to college-level education. The journey comprises primary education (Grades 1-5), junior secondary education (Grades 6-9), senior secondary education (Grades 10-11), and college-level education (Grades 12-13). Notably, the Grade 5 scholarship and General Certificate Examination, Ordinary Level (GCE O/L), are highly competitive, as they hold the key to better educational opportunities. Success in the Grade 5 scholarship exam opens doors to improved schools, while a strong performance in the O/L exam offers students the chance to choose between different subject streams, including Arts, Science, Maths, and Commerce. Furthermore, the GCE Advanced Level (GCE A/L) examination is a pivotal point in the educational journey, as it grants access to government universities. Exceptional achievers at the A/L examination can secure admission to the national university system.

1. **Introduction**

The general education system in Sri Lanka provides 13 years of education in three stages; children aged 510 attend primary school (Grade 1-5), and at the end of grade 5, the children sit for the grade 5 scholarship examination. Children aged 11-14 study in junior secondary school (Grade 6-9) and are in senior secondary school (Grades 10-11) at 15-16 years, studying for the General Certificate Examination, Ordinary Level (GCE O/L). At 17-18 years they are at college level (Grade 12-13) for the GCE Advanced Level (GCE A/L).

The grade 5 scholarship and the GCE O/L are regarded as very competitive examinations, since the former offers children who achieve the highest marks in the scholarship exam the chance to go to a better school with better facilities, while a good grade at the O/L exam helps the students to get into a better school while allowing them to select among subjects such as Arts, Science, Maths and Commerce. As mentioned above, the A/L exam offers students the opportunity to enter a government university. The top performing students at the A/L examination have the opportunity to enter the national university system.

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This exam is crucial for most students as they consider it the gateway to getting into university. Most students make a great effort when studying for their A/L examinations because this is how they get admission to the university to work in their chosen area of specialty. The higher their total marks, the better their chances of being able to choose from among the top universities with the most prestigious faculty.

Most students prefer to enter public rather than private universities. As a result, the education system in Sri Lanka is heavily exam-oriented. Parents, teachers, principals and education officers play a major role in preparing students for the A/L examination and the pressure on students from their parents and teachers tends to reach an all-time high before and at the time of the exam, which often affects their performance. It also appears that the education system is designed to reward the scoring of high marks and tends to neglect actual learning and the nurturing of citizens with well-balanced personalities. As a result, most students suffer tension and stress due to this prevailing culture. The National Child Protection Authority (NCPA), (2018) in a research study with a sample of eight hundred, showed that 69% of the students were overwhelmed by their exams, while 67% required extra tuition. Mendis (2018) also described experiences in clinical practice showing that A/L students with stress were predisposed to the development of panic attacks and acute stress reactions. Some go into depression as well. Many students are hospitalized with these symptoms during their A/L exams. On the other hand teachers are also under considerable pressure for students to perform well and they want to be able to show statistics of a 100% pass rate or to show that the students receive very high marks. Some teachers take this in a positive spirit but for most, it becomes a marathon with the ultimate aim of producing the results they desire, without taking into consideration the students wishes. Thus it seems to be very important to investigate the prevalence of stress and stressors and the gravity of each stressor for A/L students, as this could help to initiate counseling intervention programs, strengthen the students coping capabilities, motivate stress management initiatives among students and initiate policy decisions and reform.

Stress is the particular physical and psychological condition of an individual experiencing tension and worry. Examination stress is a specific condition of anxiety and tension experienced during examinations. People with examination stress display overt as well as less obvious changes in behavior and these changes can be positive or negative in nature and effect. Examinations are a part of academic life, both in school and in higher education. It has been said that sometimes students' exam stress can lead to mental health issues. While it is perfectly normal to feel some stress, excessive anxiety will reduce effectiveness. Students have to sit for examinations in school, college, university or other competitive examinations, during which they face a great deal of stress. This has led to a rise in students'issues relating to their psychological, social, educational and mental wellbeing and more attention needs to be paid to this, by educationists and society. There are many comprehensive empirical studies presented by international researchers on this topic, but although this is now a serious problem in modern-day Sri Lankan society there is a huge research gap on the subject, in the Sri Lankan context. Thus, the research problem of this study was to determine; what are the trigger factors and the prevalence of stress? And what are the stress management strategies being utilized by students before sitting for their A/L examination.

2. Aim and Objectives of the Study

The main objective of this study was to identify the nature of the trigger factors causing stress, the stress levels and stress management strategies utilized by A/L students. Specifically, the purpose of this study was to:

- Identify the trigger factors that cause students to experience exam stress
- Identify the pre-examination stress levels of A/L students,
- examine student stress-management strategies and needs of counseling

3. Review of Literature

Stress and Distress

There is a slight difference between the terms _stress and _distress', but some psychologists regard these two concepts as the same. Stress can be cumulative and accumulated stress can be identified as distress, which is harmful. Thus, distress is negative and leads to a reduction in the academic performance of students Gokhan, (2008); Allen, Batty & Dodd,(1985). Depending on cultural and social backgrounds, personal traits, experiences and coping skills, students may perceive the same stressor differently.

In academic institutions, stress can have negative consequences if not well managed. Stress is harmful and dysfunctional, but not always. An optimal level of stress can enhance the learning process. However, an excessive level of stress can lead to physical and psychological health problems. It can undermine students' self-esteem and

confidence which may affect their academic performance and personal development Lee & Larson, (2000); Lou & Chi, (2000). According to research findings, the sources of stress or stressors can be divided into two main categories; environmental factors and individual factors.

There are many environmental sources of stress, such as economic and social issues, technical and political uncertainties. Some people are more prone to stress, which can be explained by individual differences and preferences such as family problems, conflict in the family, divorce, separation, relationship issues with parents and children, economic problems, attitudes, values, beliefs and personality. There are three types of stress—mild stress, moderate stress and severe stress. Students with mild stress may exhibit behaviors that do not disrupt others, but it may indicate that something is wrong and assistance is needed. Students in moderate stress may exhibit behaviors that indicate significant emotional desolation. They may also be reluctant or unable to acknowledge the need for personal help. Students in severe stress exhibit behaviors that signify an obvious crisis and that necessitates emergency care Lee & Larson, (2000); Gokhan, (2008).

Empirical Literature

Pre-examination stress is a common condition faced by students prior to exams and it is quite predominant among students. Studies have been conducted to assess the impact of stress on students prior to examinations. Academic examinations have often been used in stress research because they are predictable, standardized, and discrete examples of real-life stress Allen, Batty & Dodd, (1985). Undergoing examinations has been associated with changes in mental and physical health including increased anxiety Francis, (1979) and increased negative moods Wolf, (1994). A mild degree of stress and strain can sometimes be beneficial for students preparing for an examination. For example, feeling mildly stressed when carrying out a project or assignment often compels us to do a good job, focus better and work energetically. But if the students feel intense stress before and during an examination, it has consequences for mental health and somatic symptoms (Lee & Larson, (2000) and; Kumari and Jain, (2014).

Many empirical studies have investigated excessive stress and its consequences. Every year about 25,000 students in the age group of 18 to 20 years commit suicide during the examination months (i.e. March to June) in Rajasthan, India (Banerjee's (2001), Due to high examination-related stress, the students spent less time socializing and engaged in passive and active leisure, which may further magnify the effects of examination stress (Lee and Larson, (2000). Signs of pre and post-examination stress include irregular sleep, feeling tired, isolated or sad, aching all over, suffering from stomach upsets, a feeling of restlessness or a condition where you cannot recall what you studied, panicking when you see a question and you cannot answer it, and your mind going blank. This has been experienced by many normal students and it is not very mysterious or difficult to understand. Such stress can be easily managed by following a plan of helpful suggestions. Mohapartra, Panigrahi and Rath (2012) reported a rise in the number of teenagers seeking help for _exam-related‘ stress and the British Association for Counseling and Psychotherapy also reported an increase in the demand for such services. A few of the important predisposing factors for examination stress include family pressure for the best result, deciding examinations for future growth, emotional immaturity, the peer factor, poor self-image and negative thoughts and the consumption of stimulating agents like tea, coffee, cola, etc., before the exams. Suicide attempts by students are more common during examination time or during the releasing of exam results. Students may get depressed or develop phobias and in such cases they may need counseling, antidepressant drugs or more family support.

Stress and Stress Management Strategies

Researchers have presented different views on coping and stress. Handling stressful situations or stressors depends on how people cope with it and resilient students seem to cope well with unusual strains and stressors Compas and Epping, (1993). Lazarus (1990) views distress as an emotional reaction, whereas coping always involves effort, in order to deal with stress. These efforts allow for the management and alteration of the individual and their relationship with the environment, in order to reduce negative emotions or solve stress-related problems (Huzzif and Ronan, (1999). Researchers often distinguish two major types of coping efforts—problemfocused and emotion-focused Carver, (1997); Lazarus, (1990); Lazarus & Folkman, (1984). Problem-focused coping is aimed at problem solving or doing something to alter the source of stress. Emotion-focused coping is aimed at reducing or managing the emotional distress that is associated with the situation.

Although most stressors elicit both types of coping, problem-focused coping tends to predominate when people feel that something constructive can be done, whereas emotion-focused coping tends to predominate when people

feel that the stressor is something that must be endured Carver, (1997); Lazarus, 1990; Lazarus & Folkman, 1984). In a study on stress and coping ability relating to university entrance examinations (students in the 12th grade) Lee and Larson (2000) proved that specific coping strategies for exam stress are related to psychological and physical adjustment. Further, problem-solving and information seeking coping were found to be related to a reduction in depression.

Wang and Chang's (2005) stress, coping and psychological health study found that students with examination stress generally used problem-focused coping strategies including optimistic action and social support to deal with their entrance exam stress. A significant interaction was observed between perceived stress and problem-focused coping used for psychological health. According to Lazarus and Folkman (1984), coping resources include health and energy, existential beliefs (e.g., about God) or general beliefs about control, commitment, skills, social support, and material resources. Although other researchers have used the concept of coping resources in their research, interestingly, it appears that many have minimized or seemingly dismissed the role of existential beliefs in particular (e.g., Sandler, Wolchik, MacKinnon, Ayers, & Roosa, (1997). As pointed out by Lazarus and Folkman (1984), in spite of its theoretical importance as a resource, little research has been conducted on how existential beliefs, including religious or spiritual beliefs, are manifested in coping processes. Some studies, which employed open-ended questions, suggest that 18-69% of participants spontaneously report that their faith was helpful to them in coping with a variety of life problems (Pargament & Brant, (1998).

Methods

The survey design and random sample method were employed for this study. The selected sample students were in the Science, Commerce, Arts and Maths streams and were sitting for the A/L examination in August 2018. Of one hundred and seventy-five students, one hundred and sixty-eight were from 6 popular 1AB schools in Colombo.

4. 1. Instrument: The stress perception scale Children and Adolescents' Stress Scale (Lohaus, 2006) and Coping Questionnaire was based on problem-focused, religious and social support coping sub-scales, along with demographic information. Stress trigger factor sub-items were included based on literature, and the questions were developed to measure natural support-seeking from the psychological counseling service in school. The standardized stress questionnaire was translated by three academics in the field of psychology, who analyzed whether it was culturally sound for students in Sri Lanka. The reliability of the instrument presented in this study was (r=.78). As part of the procedure of the study, informed consent was obtained from the participants and permission was obtained from the school authorities. Ethical clearance was approved by the faculty research development committee of the Faculty of Education. The study was conducted one month before the examination. Data analyzing methods: Mainly quantitative data analysis techniques were used as average mean and standard deviation, t-test, and percentages and interview results were explained descriptively.

5. **Results and Discussion**

Table 1: Demographic Data

	Category	**N**	**%**
Gender	Male Female	80 88	48 52
Race	Sinhalese Muslims	164 4	98 2
Religion	Buddhist Catholic Islam	149 15 4	89 9 2
Living with	Parents Grandparents Mother Relatives School hostel	142 5 6 5 10	84 3 4 3 6

Of the 175 students selected, 168 (96%) A/L school students responded to this survey. 52% (88) of whom were female and 48% (80) were male (Table 1). A majority of the participants were Sinhalese 98% (164), with Buddhism being the dominant religious background 89% (149). Most of the respondents lived with their parents 84% (142), with grandparents 3% (5), while 4%, (6) were living with their mother, 3% (5) with relatives and 6% (10) were from school hostel students. All the sample (100%) students were from 1AB popular schools.

Table 2: A/L Students Stress Related Trigger Factors

Stress Factors	Mean	SD
Heavy academic workload	4.23	.684
Lack of time to review what had been learned	3.90	.936
Large volume of content to be learned	4.38	.987
Higher self-expectation	4.40	1.12
Parental influence to study	3.86	1.03
Having difficulty in understanding the content	3.77	.709
Getting poor marks	3.64	.862

According to the table 2, ‗Higher self-expectation', (M=4.40, SD=1.12), ‗A large amount of content to be learned'(M=4.38, SD=.987) and ‗Heavy academic workload' (M=4.23, SD=.684) were shown to be the most prominent factors affecting the stress levels of all the various A/L students. ‗The lack of time to review what had been learnt and ‗Parental influence were ranked as the fourth and fifth factors of stress. Students also indicated the reasons: ‗Lack of time to review the subjects of the extra classes' and ‗The volume of content in the school curriculum' as well as ‗Tuition classes'. 95% of the sample students participated in extra tuition classes and 86% of the sample students took extra classes after school, which sometimes went on till evening and night every day. Students had three extra classes each, in Science 78% (25), Maths 78% (32) and Commerce 69% (24) respectively. The Maths students, 49% (20) and Science students 41% (13) had a lot of anxiety about their low marks, and about the selection of their subject stream, in contrast to the Arts students. Arts students went for two classes for each subject, 75% (45) of the sample out of the total arts students (60). The interview results showed that the parents were pressuring the students: ―Always saying to study‖, ―Parents are not satisfied with the students‖, ―Study time duration‖, ―Bring a lot of pressure about the term test marks‖ and ―Remind them constantly about their high expectation about future goals and the grade that had to be achieved at the exam‖. The students stress prevalence Stanine score was between (3-7) and its interpretation was 17-83%. According to the mean and standard deviation scores, A/L students presented mild 67% -moderate 33% stress levels, one month before the examination.

The prevalence of the physical difficulties of stress is seen at a significantly higher level in the female students, as compared to their male counterparts (M=1.53, SD=.542), female (M=1.79, SD=.584) (t=-3.0, df=166, p<.002). According to the results of the independent sample, the t-test female students experienced greater psychological-emotional difficulties in stress than the male students. The sub-scale of SAD showed that the male students presented (M=1.70, SD=.739) and the female (M=2.39, SD=.956), (t=-5.16, df=166, p<.001). Anger in male students showed as (M=2.20.SD,=829), female 2.83), (t=-4.26) df=166, p<.001). ‗Fear in male students (M=1.94, SD=.067), female (M=2.46,SD=.717), (t=-4.09, df=166, p<.001) respectively. The prevalence of stress was observed in that psychological–emotional difficulties had increased in contrast to physical difficulties and this was seen more in the female students than the male students. Accordingly, the female students have more psychological difficulties than the male students. These findings of students stress and their physical and psychological difficulties are in line with previous studies (Lee & Larson, (2000) and; Kumari and Jain, (2014).

Table 3: Students Overall Stress Prevalence; the differences between subject streams

Subject Stream	N	Mean	SD	t	df	p
Arts	60	12.02	4.26	-2.828	58	.006

Maths	41	12.66	4.15	-.346	39	.731
Bio-science	32	7.60	3.11	-2.532	30	.017
Commerce	35	8.74	4.22	-4.970	33	.000

According to Table 3, the prevalence of student stress in the different subject streams showed that in the overall stress sub-scales physical, psychological-sub scales: sadness, anger and fear: Mean scores in the Arts stream were at (M=12.02, SD=4.26) t=-2.828, df=58, p <.006;

The Maths students' overall subscales stress was at (M=12.66, SD=4.15), t=-.346, df=39, p=.731); the Bioscience students' stress was at (M=7.60, SD=3.11) t=-2.532, df=30, p< .017); the Commerce students' stress was at (M=8.74, SD=4.22) t=-4.97, df=33, p<.000) respectively. The Arts, Science and Commerce students all showed stress and it was significantly different to the Maths students, although the independent t-test results showed that there were no significant differences between the Maths students

Descriptive statistics. Minimum score 2 and maximum score 8. Mean score interpretations: 2.00 = have not been doing this at all, 2.01-4.00 = have been doing this a little bit, 4.01-6.00 = have been doing this a medium amount, 6.01-8.00 = have been doing this a lot.

According to Table 4, Engaging in religious activities such as going to the temple/church, chanting pirith stanzas, praying for God's help/help from the Dhamma were (M=6.28, SD=2.21). Trying to find emotional support was (M=5.86, SD=1.36). Trying to get advice/support from someone about what to do (M= 5.10, SD=1.54) and meeting the counsellor (M= 4.11, SD= .986) were the most common strategies that the students used to cope with stress from the A/L exam. Problem solving coping was seen at medium levels. Other coping strategies were: Trying to sort it out by doing something about it (M= 4.63, SD= 1.68) and Trying to think of a solution to get over the problem (M=3.46, SD=1.22). The students' stress and coping strategies findings are in line with studies done by Pargament & Brant, (1998), Wang and Chang (2005), Lazarus and Folkman (1984) and Lee and Larson (2000). In the sample, most, 71% (120) of the students answered _yes' to the question about preferring to explain their difficulties to the class teacher, relatives or counselors, rather than their peers and parents. 29% (48) gave no response. Students who participated in counseling sessions to resolve their problems were categorized as female 33% (55), male 13% (21). Only one school had conducted a workshop for the management of exam-related issues in compared to the other sample schools.

Conclusion and Recommendations

This study examined the causes of the factors related to stressors and the stress management strategies of students sitting for the A/L examination. It examined the causes of stress, the level of the students stress and the relationship between the subject stream and the student's characteristics and their difficulties in coping with various stress levels, showing the association between various coping strategies and counseling needs.

The level of stress in the population studied was mild-moderate, when compared with the results from other local and international studies. Some of the trigger factors of stress were identified as a high self-expectation, the large volume of content to be learned and a heavy academic workload. These were seen as the most prominent factors affecting the stress level of all streams of A/L students. A lack of time to review what had been learned, parental pressure to study, difficulty in understanding the learning content and low marks were also trigger factors for stress. Extra tuition classes also increased the students stress, but that was mostly seen in the cases of the Science and Maths stream students, in contrast to the students in the other two streams. Among the Maths students, 49% (20) and Science 41% (13) students showed a lot of stress about their low marks and the selection of their subject stream, in contrast to the Arts students. Parental influence and parental expectations also increased the stress levels of the students.

The female students had significantly higher stress levels when compared with their male counterparts. According to the results of the independent sample t-test, the female students experienced greater physical and psychological difficulties with stress than the male students. The sub-scale of SAD stated that the female students presented significantly higher levels of stress than the male students. The sub-scale findings relating to anger and fear also proved that the female students had significantly higher stress levels than their male counterparts. It was also observed that the psychological issues were greater than the physical ones and were manifested more in the female students than the male students. Thus, it can be concluded that the female students have more psychological difficulties than their male counterparts.

The female students‘ stress levels were significantly more than the males‘ and the proportion of female students with stress was also significantly higher. The students already employ various coping mechanisms to combat their stress. Students seek social support and use problem-solving coping strategies. They also engage in religious coping strategies.

Identifying these students for proper counseling could help to reduce or prevent their stress before and during the College Level examination. It is important to establish a professional counseling service in the school system with an adequate number of well-trained counselors, to meet the counseling needs of College Level students. It is also important to conduct psychological awareness training programs including advice on how to study, how to prepare for the exam, time management, problem solving and cognitive techniques including information on techniques to improve the memory, when focusing on the exam. Stress management workshops should be compulsory at all schools offering the College Level exam. This could help to reduce psychological stress among the students and would enhance their coping skills, in order to deal with stress before and during their exams. Moreover, it would be worthwhile to establish a proper system in each school to identify students who are prone to stress as soon as possible, in order to reduce or prevent the adverse consequences of such stress.

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