

Original Research Article

DOI: <http://dx.doi.org/10.18203/2394-6040.ijcmph20203361>

Level of stress, factors associated with stress and coping strategies among advanced level students attending tuition classes in a selected educational zone in Sri Lanka

Uthpalee P. Athukorale¹, Naduni A. P. Balasooriya¹, Pradeesha L. S. Jayasinghe¹, Pavithri M. Nagawedegara¹, Chamini Y. Ranasinghe¹, Ramani Perera², Sampatha E. Goonewardena^{3*}

¹Faculty of Medical Sciences, University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka

²Department of Psychiatry, Faculty of Medical Sciences, University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka

³Department of Community Medicine, Faculty of Medical Sciences, University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka

Received: 04 June 2020

Revised: 09 July 2020

Accepted: 14 July 2020

***Correspondence:**

Dr. Sampatha.E. Goonewardena,
E-mail: samantha@sjp.ac.lk

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Advanced level is a challenging examination due to the limitation of University entrance opportunities leading to high level of stress. Several issues have affected them irrespective of the stream of study, for which they tend to adapt different coping strategies. Therefore, the objective of this study was to determine the level of stress, factors associated with stress and coping strategies among advanced level (A/L) students attending tuition classes in selected Educational zone, Sri Lanka.

Methods: A descriptive cross- sectional study was conducted among 364 A/L students aged between 17-20 years attending a selected tuition class. Self-administered questionnaire was used with 35 item coping strategy check list and DASS-21, both tools were pretested and validated in Sri Lanka. Data was analysed using SPSS 15.0 software.

Results: Vastness of the A/L curriculum was a significant stress factor between males and females ($p=0.001$). Stress of getting lower grades and poor time management were higher among females ($p=0.027$, $p=0.003$). Males reported change in sexual habits ($p=0.003$) and alcohol /cigarette use ($p=0.001$). Lack of vacation and fear of academic failure were the most common physical and emotional stressors respectively. Seeking advice from a trusted person, being with others, blaming themselves for the situation, engaging in religious activities, listening to music, constantly thinking about the problem and crying to self were common coping strategies adopted by females. Immediate problem solving and consuming alcohol/ drugs were common coping strategies by males.

Conclusions: Males had more social and physical stress associated factors whereas females had academic and emotional stressors. Different methods of coping strategies were adopted by males and females.

Keywords: Advanced level students, Coping strategies, Stressors, Stress

INTRODUCTION

Advanced level is regarded as the most challenging examination in the Sri Lankan education system merely due to the limitation of the university entrance

opportunities available. The personal and social sacrifice they have to make in order to maintain a good academic result in a highly competitive environment puts the student under a lot of stress. Stress can be defined as a condition occurring when there is an “imbalance between

demands and resources" or when "pressure exceeds one's perceived ability to cope.¹ Therefore, negative stress may cause responses ranging from tiredness to severe depression. When considering the available local statistics, a study to evaluate stress among school-going adolescents aged 15-19 years in Gampaha district showed 47.2% prevalence of stress and higher prevalence was identified among males than females.²

There are a lot of educational, social, physical and emotional stressors that these students have to face during this period. The demand for educational achievements, high parental expectations, family factors and romantic relationships build up a stressful environment towards the student. In a descriptive cross-sectional study conducted among advanced level (A/L) students comprising 360 students in Wennappuwa, Sri Lanka revealed the prevalence of stress among males and females as 32.2% and 38.9% respectively and it also suggested that negative family environment and love affairs cause high levels of stress in school-going adolescents.³

Coping strategies consist of the responses (thoughts, feelings and actions) that are called upon by an individual to deal with problematic situations (i.e. stresses), encountered in everyday life and particular circumstances.⁴ At the face of stressful situations, it is their coping behaviours that will identify how adolescents deal with their stresses. Negative stress factors may lead them to engage in high-risk behaviours such as alcohol and substance abuse and unprotected casual sexual relationships which might end up in teenage pregnancies and sexually transmitted infections. According to two studies conducted in Australia and in India the most common coping strategies used by adolescents were trying to solve the current problem, avoid being isolated and seeking relaxing diversions such as engaging in religious activities, listening to music and singing.^{5,6}

However, only a few studies have assessed the stress level, stress factors and coping strategies among the A/L students in Sri Lanka, thus it has become a national concern. Given the presence of inadequate results on the above criteria, our study aimed to determine the prevalence of stress among A/L students and to understand associated stress factors as well as different kinds of coping strategies adopted by the students in a local setting.

METHODS

Study design, participants and procedures

A descriptive, cross-sectional study was carried out. We recruited 364 male and female A/L students aged 17-20 years in Biology and Mathematics streams attending a selected tuition class in Nugegoda educational zone, Colombo district, Sri Lanka. We excluded students attending revision classes, A/L students of other streams and students following London A/L stream. At 95%

significance level, assuming 38% of prevalence of stress according to a study done in Gampaha district, Sri Lanka and assuming a 10% non-response rate, the final sample size was 364.⁷ Stratified random sampling was used as the sampling technique. Data was collected from March till August 2018. After receiving informed written consent, a pre-tested self-administered questionnaire was developed and was randomly distributed an equal number of questionnaires among male and female students of the selected class, until our sample size was achieved.

Study instruments

Data was collected using a self-administered questionnaire which comprised of 4 sections. General information, associated factors of stress, Validated depression anxiety stress scale with 21 items (DASS- 21) as a screening tool and 35 item Coping Strategy Checklist (CSCL).

The depression, anxiety and stress scale-21 items (DASS-21) is a set of three self-report scales designed to measure the emotional states of depression, anxiety and stress over the past week. Each of the three DASS-21 scales contains 7 items, divided into subscales with similar content. The depression scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia and inertia. The anxiety scale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The stress scale is sensitive to levels of chronic nonspecific arousal.

It assesses difficulty relaxing, nervous arousal, and being easily upset/agitated, irritable/over-reactive and impatient. Scores for depression, anxiety and stress are calculated by summing the scores for the relevant items and multiplied by 2 to calculate the final score. Each of the 21 items in this instrument has a 4-point Likert scale (0-3) with the scores valued as follows: 0- never, 1- sometimes, 2- often and 3- almost always. Final scores ranging from 0-14 indicates normal, 15-18 indicates mild stress, 19-25 indicates moderate stress, 26-33 indicates severe stress and 34+ indicates extremely severe stress.⁸

The CSCL consisted of both positive and negative coping strategies. Each of the 35 items in the list uses a 4-point Likert scale from 1 to 4 (1=never and 4=always) which reflects the frequency of the use of each coping method by the student. The frequency of the use of each coping strategy by the sample is then analyzed.⁷ Both tools have been validated in Sri Lanka.^{7,9}

Five types of stress factors were identified from literature namely academic, social, physical, emotional and personal. Face and content validity were taken from an expert in the Psychiatry Department, University of Sri Jayewardenepura.

Pre-test

Pretesting of the questionnaire was conducted in another educational zone to detect any problem due to improper wording, interpretations and irrelevant content of responses. A pilot study was conducted among A/L students attending a private tuition class in another educational zone in the Colombo district, Sri Lanka. The study group consisted of 10-15 students of the same age group and study streams.

Data analysis

SPSS Statistical Software Package was used. For the calculation of the proportion of depression, anxiety and stress, univariate and bivariate analysis and appropriate statistical tests were carried out. The associated factors for stress and coping strategies were analyzed using the Chi-square test and $p<0.05$ was taken as a significant level.

Ethical considerations

Ethical clearance was obtained by the Ethics Review Committee of the Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka. Before meeting students, informed written permission was taken from the institute instructor. Participants were selected from the study setting randomly, entirely voluntarily, with informed consent after giving all necessary information about the study. They had the right to withdraw from the study anytime or not participate in the study if wished to. Each questionnaire had a serial number to ensure anonymity. This serial number was used throughout the process of data collection and analysis. Study subjects were ensured of confidentiality. Collected data was used only for this research study and was not shared with others for any other purpose.

RESULTS

The distribution of socio-demographic variables in the sample is shown in Table 1. Of the 364 participants, there were an equal proportion of males and females. Majority of respondents (98.2%) were in the age group of 17 to 18 years (mean age was 17.41, $SD=0.54$) and attended government schools (89.0%). Most respondents were studying in mathematics stream. The majority came from nuclear families (84.3%) and most reported their parents were well educated up to A/L or above (89.6%) (Table 1).

Figure 1 shows that an almost equal proportion of boys and girls had depression, stress and anxiety with a slight female preponderance.

As depicted in Table 2, an almost equal proportion of males and females were found to have mild and moderate stress whereas 15% of males and 16.8% of females were suffering from severe and extremely severe stress. However, the difference was not statistically significant

($p>0.05$). Among both sexes, almost half (50%) were normal. We inquired about the types of stress under five types namely academic, social, physical, emotional and personal. According to the results of both sexes, most common academic stress factors were vastness of A/L curriculum (79.6%), not enough time for revision (79.3%), lower grades (76.5%) and poor time management (72.9%).

Table 1: Frequency distribution of students according to the socio-demographic characteristics (n=364)

Characteristic	Frequency	Percentage
Age (completed years)		
16	1	0.3
17	219	60.2
18	140	38.5
19	2	0.5
20	2	0.5
Sex		
Male	180	49.5
Female	184	50.5
Subject stream		
Biology	173	47.5
Mathematics	191	52.5
Type of school		
Government	324	89.0
Semi government	35	9.6
Private	5	1.4
Medium of study		
Sinhala	353	97.0
English	11	3.0
Type of family		
Nuclear	307	84.3
Extended	57	15.7
Education level of parents		
Below ordinary level	1	0.3
Up to ordinary level	36	9.9
Up to A/L	253	69.5
Graduate	73	20.1

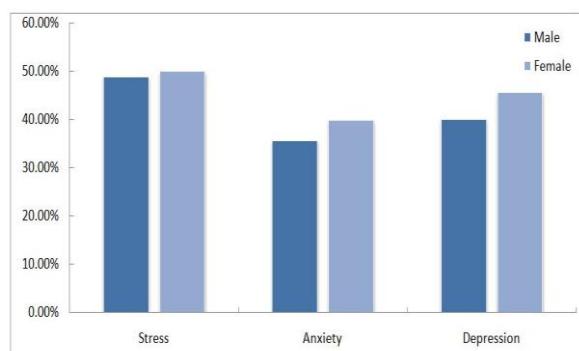


Figure 1: Frequency distribution of prevalence of stress, depression and anxiety among the study population (n=364).

Table 2: Comparison of the degree of stress among males and females.

Gender	Normal N (%)	Mild and moderate stress (%)	Severe and extremely severe stress (%)	Total N (%)	Significance
Males	92 (51.1)	61 (33.9)	27 (15.0)	88 (48.9)	p=0.905
Females	92 (50)	61 (33.2)	31 (16.8)	92 (50)	p=0.924

The results depicted misunderstanding/ conflicts among colleagues (64.8%), inability to socialize with peers (60.3%), relationship problems (50.8%) as the most common social stress factors. Among the physical stressors, lack of vacation was a stress factor for 77.5% of students followed by 64.6% of students responding for lack of entertainment. High parental expectations (76.8%) and fear of academic failure (70.5%) were among the most popular emotional stress factors. The most common personal stress factor was the change in sleeping habits (80.5%).

Table 3: Comparison of stress associated factors among males and females.

Associated factors	Males N (%)	Females N (%)	Significance
Vastness of A/L subjects	130 (45.1)	158(54.9)	p=0.001
Lower grades	128(46.2)	149(53.8)	p=0.027
Poor time management	118(44.7)	146 (55.3)	p=0.003
Change in sexual habits	28 (71.8)	11 (28.2)	p=0.003
Alcohol and drugs intake	14 (93.3)	1 (6.7)	p=0.001
Lack of confidence	66 (42.3)	90 (57.7)	p=0.018
Relationship problems	54 (59.3)	37 (40.7)	p=0.029
Bad living conditions	45(60.0)	30(40.0)	p=0.040

As shown in Table 3 we compared some stress factors among males and female students. Vastness of A/L curriculum (p=0.001), getting lower grades (p=0.027), poor time management (p=0.003) and lack of confidence (p=0.018) were more common among female students when compared to males and these factors were statistically significant. Personal stress factors like changing in sexual habits (p=0.003) and alcohol/cigarette use (p=0.001) were higher among male students and these were statistically significant. A higher proportion of males stated about stress related to bad living conditions (60.0%) and relationship problems (59.3%) compared to female students and it was statistically significant (p<0.05).

According to the coping strategy checklist, we amalgamated never and rarely together and sometimes

and always to test the significance. Out of the 35 coping strategies assessed by Coping Strategy Checklist, only a few coping strategies showed a statistically significant difference between males and females of the study population as shown in Table 4.

Table 4: Comparison of coping strategies adopted by males and females.

Coping strategy	Never or rarely N (%)	Sometimes or always N (%)	Significance P value
Always I will be with others without getting isolated.			
Males	54 (30.0)	126 (70.0)	0.006
Females	53 (28.8)	131 (71.2)	
I solve the current problems immediately.			
Males	50 (27.8)	130 (72.2)	0.006
Females	83 (45.1)	101 (54.9)	
When I face a stressful situation, I relax my mind concentrating on my religion and on engaging in religious activities.			
Males	80 (44.4)	100 (55.5)	0.002
Females	47 (25.5)	137 (74.5)	
When I encounter a psychologically stressful problem I listen to music or sing to forget.			
Males	54 (30.0)	126 (70.0)	0.014
Females	30 (16.3)	154 (83.7)	
I feel like taking drugs when I am stressed (alcohol, cigarettes, heroin, etc).			
Males	157 (87.2)	23 (12.8)	0.000
Females	176 (95.6)	8 (4.3)	
When I encounter psychological stress I cry to myself.			
Males	133 (73.9)	47 (26.1)	0.000
Females	95 (51.6)	90 (48.4)	
I make up my mind after telling myself that it didn't happen for real.			
Males	129 (71.6)	51 (28.3)	0.001
Females	96 (52.2)	88 (47.8)	
I keep worrying constantly thinking about the problem.			
Males	102 (56.7)	78 (43.3)	0.002
Females	78 (42.4)	106 (57.6)	

Being with others, engaging in religious activities, listening to music, constantly thinking about the problem, telling themselves that it didn't happen for real and crying to self were common coping strategies adopted by females which were statistically significant ($p<0.05$). Immediately trying to solve the current problem and consuming alcohol/ drugs to cope with a stressful situation were common coping strategies by males ($p<0.05$).

DISCUSSION

Our study represented the A/L students who attended tuition classes in a selected educational zone in Sri Lanka and the purpose of our study was to determine the level of stress, factors associated with stress and coping strategies among the students.

The results of our study showed that almost equal proportion of stress, Depression, and Anxiety was found to have among males and females and the difference was not statistically significant ($p>0.05$). However, 98.7% of the study population (M-48.8% F-49.9%) was screened positive for stress whereas 85.6% and 75.3% were screened positive for depression and anxiety respectively. These findings were supported by a study conducted in Wennappuwa, Sri Lanka where they reported similar proportions of stress and it was not significant among males and females.³ However, findings of a study which was carried out in Rathnapura, Sri Lanka to screen for symptoms of anxiety and depression among 445 students were in contrast to ours in which they demonstrated a significant difference between the two sexes.¹⁰

Our findings reported an almost equal proportion of males and females having mild and moderate stress whereas 15% of males and 16.8% of females were suffering from severe and extremely severe stress. However, the difference was not statistically significant ($p>0.05$). The prevalence of stress among students studying in biology and mathematics streams was 49.7% and 49.3% respectively. Association between the stress level of the student and educational level of parents was also not statistically significant ($p>0.05$). A study conducted among 15 to 19-year-old school-going adolescents in Gampaha district, Sri Lanka to assess stress, stressful life events, associated factors and coping strategies reported a higher percentage of males having stress when compared to females. However, the difference was statistically not significant ($p>0.05$).⁷

According to our study, the most common academic-related stress factors were found to be the vastness of A/L curriculum (79.6%), not enough time for revision (79.3%), lower grades (76.5%), academic competition with peers (76.2%) and time management (72.9%). Least common academic-related stress factors were language difficulty (8.0%) and lack of school/family support (21.5%). Our findings supported the research done in Rathnapura, Sri Lanka.¹⁰

Concerning the personal stress factors, the commonest was changing in sleeping habits (80.4%) and the least common was alcohol/ cigarette usage (6.4%). Misunderstanding/conflicts among colleagues (64.8%) was found to be the most common social stress factor with all other social factors such as inability to socialize with peers (60.3%) and relationships problems (50.8%) having higher prevalence. In contrast to our findings, a study conducted in Wennappuwa, Sri Lanka had reported less social related stress among adolescents.³ This could be due to the cultural diversity in Colombo and the urban lifestyle.

In our study, high parental expectations (76.8%) and fear of academic failures (70.5%) were found to be the commonest emotional stress factors whereas the least common emotional stress factor was the divorce between parents (5.0%). Similar findings were found in a national survey on emerging issues among adolescents in Sri Lanka which was conducted to assess the level of life skills and factors affecting their wellbeing.¹¹ They reported higher academic stress that many students felt pressured due to parents' and teachers' expectations and due to the feeling that they could do better.

A similar study was done in Zimbabwe among adolescents (15-19 years) to assess major stressors they face.¹² According to their results, adolescents experienced slight stress as measured by the Perceived Stress Scale. Major stressors included schoolwork, relationships, social life and financial hardship as a whole. According to the study conducted in Gampaha, Sri Lanka, a higher prevalence of stress was seen among students who were not living with both parents compared to 5.0% responses for the divorce between parents related stress in our study.⁷ Difference between the results of our study and Gampaha study regarding divorced parents can be because of the larger study population used in Gampaha study.

According to our results comparing each stress-related factor for gender, it was found that vastness of A/L curriculum ($p=0.001$), lower grades ($p=0.027$) and time management difficulty (0.003) have a statistically significant difference with p values <0.05 with higher female proportions against males. This can be due to the difference in perception and the difference in coping strategies.

Change in sexual habits ($p=0.003$) and alcohol/cigarette use ($p=0.001$) have a significant difference between the two sexes. These personal factors showed a higher male proportion than females. Among the students with relationship problems related to stress, 59.3% were males and only 40.7% were females and the difference was statistically significant ($p=0.029$). In Sri Lanka boys can find easy access to substances and the Colombo area is considered to have many substance suppliers. Sri Lankan culture also plays a part in most social boundaries within sexes.

Our findings showed that there was a statistically significant difference between female and male students living conditions and level of stress ($p<0.05$). Similar results were reported by the study done in Gampaha district in Sri Lanka.⁷

Students from highly educated families showed a higher proportion of psychological/emotions related stress factors when compared to students from less-educated families. Similar findings were observed in a descriptive cross-sectional study conducted in Chitwan, Nepal among adolescents in a private school.¹³

Students studying in government schools reported higher academic associated stress compared to students of semi-government or private schools. These findings were supported by a similar study conducted among adolescents in India.¹⁴ Our study revealed that poor sleeping habits were not a significant factor for stress among the students. However, a study conducted in Brazil in the objective of analyzing the effect of stress on sleep quality in a group of adolescents reported that poor sleeping habits were, in fact, a cause for stress among adolescents.¹⁵

Coping strategies most used were trying to solve the current problem, avoid being isolated and seeking relaxing diversions such as engaging in religious activities, listening to music or singing to forget. These supported the findings by a similar study conducted in Australia and a study among adolescents in Srinagar, India.^{5,6}

We also compared the sex and coping strategies used. The analysis showed statistically significant differences between males and females only with certain coping strategies. Our findings revealed that male students consumed alcohol/ drugs to cope with a stressful situation with a remarkable significance than females followed by immediately trying to solve the problem at hand. This finding was consistent with the findings of the study conducted among late adolescent students in Australia.⁵ In the study done in Srinagar, India, however, most common coping mechanisms among male adolescents were found to be talking to a friend or a parent and going to sleep.⁶ In contrast, the results of an exploratory study of stress, coping and substance use among high school youth in private schools in the United States of America revealed that more than two-thirds of students reported using a substance for managing stress.¹⁶

In our study females frequently used coping strategies such as listening to music or singing, engaging in religious activities, being with others without getting isolated and worrying constantly thinking about the problem. However, it is in contrast to findings of the study done in Australia with the most frequently adopted coping strategies among females being working hard and solving the problem, except for adopting relaxing diversions.⁵

The results of our study also indicated that out of the statistically significant coping strategies used, most are positive or active coping mechanisms such as relaxing of mind by concentrating on religious activities, tending to be with others without being isolated, solving the current problem immediately, listening to music or singing when encountered a psychologically stressful situation. Negative or passive coping strategies such as the use of drugs, crying to self and making up their mind by telling themselves it didn't happen for real are less commonly adopted. This finding is consistent with the results of a study which aimed to examine the relationships among stress, coping strategies, and depressive symptoms in overseas Chinese university preparatory students in Taiwan.¹⁷

However, the association between the level of stress and depression and the coping strategies adopted was not assessed in our study. In the study among overseas Chinese university preparatory students, a clear association between the frequencies of using active, problem-focused coping strategies and passive, emotion-focused strategies and the severity of depressive symptoms reported was found. They also found that the more serious burden was found by the respondents the more they tend to adopt a passive problem-focused or emotion-focused coping strategy.¹⁷

There were few limitations in our study. The results were obtained only from the capital of Sri Lanka and therefore cannot be generalized to the entire country. The respondents were given a very limited time frame to read, understand and fill the self-administered questionnaire and thus might not have produced the proper answers. Since the questionnaire was focused to assess the stress levels over the immediate past week and some students had exams during that time, the stress levels might have differed among individuals of the study group.

CONCLUSION

In conclusion, the results of this study show that almost equal proportion of depression, anxiety and stress were found among the two sexes. Academic stress factors were more prevalent compared to emotional, social, physical or personal stress factors. Males have more social and physical stressors and females have more academic and emotional stressors. With regards to coping strategies, males and females have different methods of dealing with problems. Considering the knowledge gathered from this study, the need of encouraging the students who are identified to have difficulties to undergo voluntary counselling and school-based psychological sessions to relieve the stress, introducing interventions offering training that focus on developing general coping skills, making policy decisions to reduce competition for higher education, improving both child-parent and child-teacher relationships and making both the parties aware of the severity of this issue and changing their attitudes towards the A/L

examination, in general, is understood, so that there would be less of a pressure on the side of the adolescent.

ACKNOWLEDGEMENTS

The authors thank all participating students and administrative staff for providing adequate time for the survey to be conducted and for their cooperation.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Lazarus R, Folkman S. Stress, appraisal, and coping. New York: Springer Publishing Company; 1984.
2. Dissanayake P, Kathriarachchi S, Wijesiri H. Development and validation of the Stress Sensation Inventory (SSI) to measure stress among students aged 15 to 19 years in Sri Lanka. Sri Lanka J Psychiatry. 2015;6(1):17-21.
3. Perera I, Suresh S. Assessment of perceived stress and associated factors among adolescents of G.C.E. Advance level classes in the divisional secretariat area of Wennappuwa, Sri Lanka. J Nursing Patient Care. 2018;3:44.
4. Lewis R, Frydenberg E. Adolescents least able to cope: How do they respond to their stresses? British J Guidance Counselling. 2004;32(1):25-37.
5. Shahrill M, Mundia L. Coping behaviour of international late adolescent students in selected Australian Educational Institutions. Global J Health Sci. 2013;6(1):76.
6. Shawl S, Mehraj N. Impact of academic stress: A study of coping strategies among adolescents. J Human Social Sci. 2017;22(12):40-5.
7. Dissanayake P. Stress and coping strategies among school going adolescents aged 15 to 19 years in the Gampaha District. PhD thesis. Postgraduate Institute of Medicine, University of Colombo, Sri Lanka; 2006.
8. Lovibond, SH, Lovibond PF. Manual for the depression anxiety and stress scales. 2nd edition. Sydney: Psychology Foundation of Australia; 1995.
9. Rekha A. Adaptation and validation of the depression anxiety and stress scale (DASS21) among students in the University of Colombo. In Proceedings of the 2012 Annual Research Symposium: 47-49 August 2012; University of Colombo, Colombo, Sri Lanka.
10. Rodrigo C, Welgama S, Gurusinha J, Wijeratne T, Jayananda G, Rajapakse S. Symptoms of anxiety and depression in adolescent students: a perspective from Sri Lanka. Child Adolescent Psych Mental Health. 2010;4(1):10.
11. Thalagala N, Rajapakse L, Yakandawala H. National survey on emerging issues among adolescents in Sri Lanka. UNICEF Sri Lanka. 2004.
12. Magaya L, Self AK, Schreiber J. Stress and coping strategies among Zimbabwean adolescents. British J Educational Psychol. 2005;75(4):661-71.
13. Bhattacharai B, Maskey S, Lopchan M. Stress and coping strategies among adolescents in private school, Chitwan, Nepal. J Chitwan Med College. 2017;6(3):51-5.
14. Kaushal Y, Koreti S, Gaur A. Educational stress and coping strategies in school going adolescents. Int J Contemp Pedia. 2018;5(4):1452.
15. Mesquita G, Reimão R. Stress and sleep quality in high school Brazilian adolescents. Anais da Academia Brasileira de Ciências. 2010;82(2):545-51.
16. Leonard N, Gwadz M, Ritchie A, Linick J, Cleland C, Elliott L et al. A multi-method exploratory study of stress, coping, and substance use among high school youth in private schools. Frontiers Psychol. 2015;6:1028.
17. Chou P, Chao Y, Yang H, Yeh G, Lee T. Relationships between stress, coping and depressive symptoms among overseas university preparatory Chinese students: a cross-sectional study. BMC Public Health. 2011;11(1):352.

Cite this article as: Athukorale UP, Balasooriya NAP, Jayasinghe PLS, Nagawedera PM, Ranasinghe CY, Perera R, et al. Level of stress, factors associated with stress and coping strategies among advanced level students attending tuition classes in a selected educational zone in Sri Lanka. Int J Community Med Public Health 2020;7:2899-905.