

The Level of Perceived Stress and Affecting Factors Due to Current Economic Crisis Among Undergraduates in Faculty of Health-Care Sciences, Eastern University Sri Lanka

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Abstract

Background: In 2021 the Sri Lankan government officially declared the worst economic crisis in the country. Due to current ongoing economic crisis in Sri Lanka is affecting the whole sectors in the country. As the undergraduate students, we also have to suffer due to restrictions of family income. Then parents have unable to afford all expenses required by university students. As a result, students have to cut down their daily expenditure. Those can involve levels of stress among undergraduates that lead to disruptions in both physical and mental health and also cause poor academic performance. Some students may have to quit their studies also. Stress is an emotional feeling for all the ages, which appears at any time of the life cycle.

Objectives: The purpose of the current study was to identify the level of perceived stress and affecting factors due to current economic crisis among undergraduates in Faculty of Health-Care Sciences (FHCS), Eastern University Sri Lanka (EUSL).

Methodology: The cross sectional descriptive study a self-administered online questionnaire was used to gather information and complete enumeration was done. The Perceived Stress Scale (PSS) instrument was used to assess the severity of the undergraduate perceived level of stress related current economic crisis. Demographic variables and affecting factors due to current economic crisis were considered.

Results: The overall mean stress score in the study population was 22.91(SD=5.386). The majority of undergraduates reported moderate stress 70.8% (N=240). A multiple linear regression analysis was applied, Pearson correlation was used, and all necessary tests have been performed. There was statistically significant, positive correlation between the level of perceived stress and their family income per month ($p=0.000$). The contributing factors correlated with perceived stress were unable to enjoy meeting people, unable to frequently visiting home, unable to take meals from outside and instead of cooking, trying to save extra expenditure money, unable to frequent shopping for dresses, cosmetics, jewellery.

Conclusion: The level of perceived stress reported by the majority of the students were moderate. Mainly their family income per month contributed to stress among them. Policymakers and the university administration have to consider more about the stress levels of the students and plan suitable programs like scholarships to manage stress.

Keywords: Affecting factors, undergraduates of faculty of health-care sciences, mean stress score, perceived stress score

Abbreviations

% - Percentage
EUSL - Eastern University, Sri Lanka
FHCS - Faculty of Health-Care Sciences
MSS - Mean stress score n - Number
p - Probability of obtaining results
PSS - Perceived Stress Score
SD - Standard Deviation
Sig. - Significance
Q- Question

Introduction

1.1 Background

According to Dunarea de Jos University of Galati, crisis has defined as a period in the dynamics of a system, and it is described as a multitude of difficulties, as a conflict or tensions, fact that makes difficult its normal work or functioning and this can lead to powerful pressures towards changing. Further he has defined, economic crisis as a situation in which the economy of a country passes through a sudden decrease of its force, decrease usually brought about by a financial crisis.

The Sri Lankan economic crisis is an ongoing crisis that started in 2019. The crisis is said to have begun due to multiple compounding factors like 2019 Sri Lanka Easter bombings, COVID-19 pandemic in Sri Lanka, foreign exchange crisis, money printing by the Central Bank, passage of antichemical fertilizer act by parliament, economic mismanagement and refusal to seek assistance from the international monetary fund (World Bank Group, 2022).

Due to those factors, in 2021 the Sri Lankan government officially declared the worst economic crisis in the county. In August 2021, the food emergency was declared. The economic crisis has resulted in electricity, fuel, cooking gas shortage and it affected all sectors of Sri Lanka including education, health, tourism, exports, entertainment and sports etc. (Economy, 2022).

As the undergraduate students, we also have to suffer. This economic recession has unfavorably affected society since family income restriction negatively influence living conditions (Walker, 2011). Then parents have unable to afford all expenses required by university students. As a result, students have to cut down their daily spending (Stein et al., 2013). Some time they have to quiet their studies also.

There is a relationship between economic crisis and mental health of individuals (Madianos et al., 2014). This leads to increase level of stress and depression (Stein et al., 2013).

According to Lazarus and Folkman (1984), stress is defined as an individual's physical and psychological reaction to an event or object or which is appraised as a threat. Especially stress arises when individuals are under overwhelming situation and believe that they are incompetent to handle. It can be the result of a continuous interaction between the individual and the environment (Romano, 1992).

However, if individuals fail to employ effective stress coping mechanisms to handle the stressful situation, become at higher risk developing severe physical and mental problems (Auerbach, 1998).

It can affect the student's self-esteem, academic achievement, personal or professional development (Kuri-

bayashi et al., 2012). Stress is associated with development of anxiety and depression (Ratanasiripong et al., 2012). Also can cause to decrease attention, reduce concentration and social interaction. Moreover, this will lead to university students' suicide, drug abuse and alcohol use (Yusoff et al., 2010).

1.2 Justification

Current economic crisis is affecting the whole country. Undergraduate students are constantly influenced by multiple stressors from different aspects of their lives and the society. Economic crisis is a one of the stressor in this current situation. Undergraduate students have been stressed by intensive demands of developmental and academic tasks with current economic stress.

An acute foreign currency shortage and the high inflation cause food, fuel and medicine shortage. Education was already in crisis prior to the economic crisis, due to the COVID-19 pandemic.

The increasing food prices will lead the students to face lack of nutrition. The students are unable to get the foods according to their wish. And they are unable to cook because of the lack of time. The increasing fuel prices cause difficulty in using personal vehicle for transportation. For the common transportation also need to pay more money. The buses have full of crowd. The students who are staying in hostel and boarding houses avoid to go home frequently because of increased transportation prices. They are missing the family and face the home sick. It causes more stress to the students.

There is a paper shortage also in the country. The price of papers is increasing. Students unable to get adequate papers for their academic purpose. The photocopy and the print prices are also increasing. The students want to pay more money for the hard copies and they are facing more difficulties while they studying through the softcopies. It also causes stress and poor academic performance.

Stress associated with academic activities has been also linked to poor health (Ginty & Conklin 2011) and poor academic performance (Stallman, 2011). This study will talk about the level of perceived stress due to current economic crisis and contributing factors among undergraduates of Faculty of health care sciences, Eastern University.

This study will help to identify the economical need and the perceived stress of the students and providing possible coping strategies such loan facilities to prevent to worsening mental distress and increase the level of academic activities.

There are no any studies conducted in Faculty of Health Care Sciences, Eastern University Sri Lanka (FHCS, EUSL) which related to above topic. Further it would be feasible to conduct this study within our capacity.

2. Objectives

2.1 General Objective

To assess the level of perceived stress and affecting factors due to current economic crisis among undergraduates in Faculty of Health Care Sciences, Eastern University Sri Lanka.

2.2 Specific Objectives

To assess the level of perceived stress among undergraduate students.

To identify the contributing factors for the perceived stress among undergraduate students.

To identify the affecting factors due to current economic crisis.

3. Literature Review

3.1 To assess the level of perceived stress among undergraduate students

In 2013 a study was carried out among undergraduate students of technological institute of central Maced-

nia about perceived stress of the undergraduate students in Greece due to economic crisis. According to this study realized increased level of stress in 2013 compared to 2009 due to the economic crisis and its effect ((Mouza, 2015)

Another study in 2010 Spain among patients attending primary care centers representing Spain's consulting population about the mental health risk of economic crisis in Spain evidence from primary care centers, 2006 & 2010. According to this study compared with the pre-crisis period of 2006, the 2010 survey has significant increase in the population of patients with mood, 19.4% major depression, 8.4% generalized anxiety disorder, somatoform 7.3% & alcohol related disorder 4.6% are identified by this study (Gili et al., 2013)

The descriptive study was carried out among undergraduates selected from two universities in Nigeria about depression, economic recession and media reporting as correlates of suicidal behavior among undergraduates. This study carried out the prevalence of depression is 16% among undergraduates & 13% among graduate students in examining the relationship between the current economic crisis and the suicidal rate registered in Spain between 2005 & 2010, rise around 8% in the suicidal rate associated with financial crisis (Makinde et al., 2019)

In 2012 study conducted among young adults from intact families who attended a public Midwestern university about the United States economic crisis. according to this study identified three hierarchical regression analysis predicting young adult's psychological wellbeing, anxiety $p < 0.001$, depressed mood $p < 0.001$ are associated with economic recession on young adults attending college (Stein et al., 2013)

Another study carried out among nursing students studying in schools of nursing in the North of Spain about perception of economic crisis among Spanish nursing student's relation to burnout and engagement (Manzano-García et al., 2017).

3.2 To identify the contributing factors for the perceived stress among undergraduate students

In 2010 a study conducted among patient's attending primary care centers representing Spain's consulting population about the mental health risk of economic crisis in Spain evidence from primary care centers 2006 & 2010. This study carried out one third of overall risk of household unemployment and mortgage payment difficulties. Associated with alcohol abuse, age, sex, marital status, educational attainment and urban rural residence (Gili et al., 2013)

Another study in 2014 conducted among undergraduates of technical educational institute of central Macedonia about perceived stress of the undergraduate students in Greece due to economic crisis. This study carried out risk factors are 0.85 for school items & 0.73 for non-school items. Increased level of undergraduate perceived stress regarding common and gender $p < 0.005$, year of study $p < 0.001$, negative correlation was found between school items and income and social items and residence (Mouza, 2015)

A descriptive study was carried out among undergraduates selected from two universities in Nigeria about depression, economic recession and media reporting as correlates of suicidal behavior among undergraduates. This study examined the risk factors of suicidal attempts of undergraduates, according to first pathway increasing unemployment, poverty, financial problems and social deprivation and also according to second pathway economic recessions frequently associated with job security and cuts in welfare protection programs. Finally identified depression, economic recession and media reporting are inversely related to social behaviour (Makinde et al., 2019)

In 2012 United States a study was conducted among young adults attending college about the United States economic crisis. This study carried out the score for woman as compared to men, age ($p < 0.1$) was significantly associated with the measure of life satisfaction. Older participants reported less life

satisfaction than younger participants. An identified economic adjustment and the financial coping strategy of education and communication predictor the higher level of anxiety (Stein et al., 2013).

3.3 To identify the affecting factors due to current economic crisis

A study was conducted under the heading of a qualitative examination of the impacts of financial stress on college student’s well-being. Insights from a large, private institution. In this study they told there is a link between financial stress and academic success, especially when it comes to student attrition. studies have shown that students who experience higher levels of financial stress are more likely to discontinue their schooling than more financially secure peers(Moore et al., 2021). In 2021, a quantitative study was conducted about financial stress and undergraduate students in Walden University. the study told that undergraduate students are a vulnerable population faced with college costs and lack of financial management knowledge, issues that have led to high student debt, failure to repay this debt, and sometimes dropping out of college. financial stress has been found to be significantly related to anxiety and correlated to academic distress as many college students report shouldering the burden of college tuition alone (P. J. Jones, Park, & Lefevor, 2018). Current research on financial stress is limited and focuses on short-term effects of financial stress on college students. For example, financial stress research often cites financial hardships for students in terms of the inability to buy books and supplies for courses, delayed access to healthcare, and student debt levels(Hicks & Hicks, 2021).

4. Methodology

4.1 Study setting

The Faculty of Health-Care Sciences, Eastern University Sri Lanka was study setting.

4.2 Study design

Cross sectional descriptive study

4.3 Study period

The study was conducted for a period of twelve months from January 2022 to December 2022

4.4 Study population

The study population was all nursing and medical undergraduates from the faculty of HealthCare Sciences, Eastern University Sri Lanka those who were willing to participate in this study including both male and female students were included.

Table 4.4.1: Number of students.

Academic year	2020/2021	2019/2020	2018/2019	2017/2018	2016/2017	2015/2016	Total
Nursing students	42	40	35	24	38		179
Medical students	95	117	75	81	84	78	530
Total of the target population in faculty							709

4.4.1 Inclusion criteria:

Undergraduate students of Faculty of Health-Care Sciences, Eastern University Sri Lanka who were willing to participate in the study were included.

4.4.2 Exclusion criteria:

Students who were participate in pilot study were excluded.

Students who submitted incompletely filled questionnaire were excluded.

4.5 Sampling method:

Complete enumeration was done.

4.6 Sample size:

The total population of selected Faculty in Eastern University Sri Lanka was 709.

4.7 Study instruments

Pretested, validated, self-administered online questionnaire was used to collect the data (annexure I). Part A – to obtain socio-demographic information of the students, questions related to their age, gender, marital states, family income per month, etc. were provided in part A of the questionnaire (Q¹ – Q⁹).

Part B - consisted of pre-validated 10 items version of Perceived Stress Scale (PSS) by Sheldon Cohen. The items of the scale were designed to tap how unpredictable, uncontrollable and overloaded respondents find own lives (Cohen and Williamson, 1988) (Q¹⁰-Q¹⁹).

Part C– based on the experiences as undergraduate student, part C of the questionnaire was designed to identify the affecting factors due to current economic crisis (Q²⁰- Q³²). It contains a total of 12 questions. The developed questionnaire had been reviewed by an expert panel consisting of 3 to establish the judgmental validity consisting of content validity.

4.8 Data Collection

Permission for collecting data obtained from the Dean, Faculty of Health-Care Sciences, EUSL which we have selected to do the research. An online survey was chosen. Google links for the questionnaires (Annexure I) shared with all the students through the respective dean of the faculty, after obtained permission to conduct the research. Google links also shared via student union, student groups and through known student contacts to encourage and increase participation of students. The purpose and benefits of the study informed to the students through an online information sheet (Annexure III) made available in the shared Google link. Students who express their consent (Annexure II) to participate in the online survey, were able to proceed to access the questionnaire automatically.

4.9 Pilot study

Pilot study was conducted among selected 11 students who were a student from each batch of FHCS, EUSL. These students were excluded from the final study sample for data analysis. Questionnaire was modified according to the results of the pilot study.

4.10 Data analysis

Table 4.10.1: Methods of data analysis

Specific objectives	Related questions	Variables	Scale of measurements	statistics
assess the level of perceived stress among undergraduate students	Q10 – Q19	Level of stress	Ordinal	descriptive statistics
identify the affecting factors due to current economic crisis	Q 20 – Q31	affecting factors	Ordinal	descriptive statistics

to identify the contributing				
factors for the perceived stress among undergraduate students	$Q^1 - Q^9$	Demographical	categorical	Chi-Squared test

Data was entered into Statistical Package for Social Sciences (SPSS) version 26.

4.10.1. To achieve the first objective

In part B each of the 10 items in PSS consisted of 5 -Likert scale (0=Never to 4=Very often) and the total score can vary from 0 to 40. Data were presented using descriptive statistics. Percentages were given in tables and figures. According to the mean value, the level of the perceived stress was graded into three categories (Cohen et al., 1988). Score 0 – 13 - Low stress level

Score 14 – 26 - Moderate stress level

Score 27 – 40 - High-stress level

4.10.2. To achieve the second objective

Chi-Squared was done to analyse the relationship between the dependent variable and the independent variable. Independent variables were demographic factors while the dependent variable is the perceived stress. The level of significance was considered as $p \leq 0.05$.

Moreover, the Pearson correlation was carried out to detect the correlation between demographic factors and the perceived stress of the students.

4.10.3. To achieve the third objective

Part C contained a total 12 items rated on 4 points ranging from 0=Does not apply to me at all to 3= Apply to me very much. Descriptive statistics was done to identify the affecting factors due to current economic crisis.

4.11 Ethical consideration

Ethical clearance for this study was obtained from Ethics Review Committee, FHCS, EUSL. Permission for collecting data were obtained from the Dean of the faculty after obtaining the ethical clearance. The participants were informed about their right to withdraw from the study prior to submitting the online questionnaire. The questionnaire coded and participants were identified by a number and not by their names. Anonymity and confidentiality of the participants were maintained throughout the study. All collected data will be processed and saved confidentially on personal computer with password. The processing and analysis was carried out only by investigators and used only for the above study.

5. Results

5.1 Characteristics of students

We distributed the Google links for the questionnaires to 709 students via student union, student groups, and through known student contacts, and received responses from 344 students, giving a response rate of 48.51%. Since 5 female students fulfilled the exclusion criteria of the study, their information was excluded. Hence, the complete responses were 339. There were 138(40.7%) males and 201(59.3%)

females, therefore female population was higher than the male population, and the mean age was 23.87years (SD 1.86).

The socio-demographic characteristics of the nursing and medical students of FHCS are presented in table 5.1.1

Table 5.1.1 Socio-demographic characteristics of students

Demographic characteristics	N	%	Demographic characteristics	N	%
Gender			Family income per month		
Male	138	40.7	<40000	63	18.6
Female	201	59.3	41000-50000	111	32.7
Age			51000-60000	92	27.1
20	12	3.5	>60000	73	21.5
21	31	9.1	NO of siblings		
22	41	12.1	0	50	14.7
23	48	14.2	1	108	31.9
24	72	21.2	2	94	27.2
25	63	18.6	3	56	16.5
26	47	13.9	4	19	5.6
27	19	5.6	5	10	2.9
28	4	1.2	6	2	0.6
Stream			Mahapola/Bursary		
Nursing	131	38.6	Have	163	48.3
Medicine	208	61.4	Have not	176	51.9
Year of the study			Residence		
2015/2016(MBBS)	30	8.8	Home	25	7.4
2016/2017(10 th NUR/12 th MBBS)	45	13.3	Hostel	286	84.4
2017/2018(12 th NUR/14 th MBBS)	70	20.6	Boarding houses	28	8.3
2018/2019(13 th NUR/15 th MBBS)	77	22.7			
2019/2020(14 th NUR/16 th MBBS)	42	12.4			
2020/2021(15 th NUR/16 th MBBS)	75	22.1			
Marital status					
Married	15	4.4			
Unmarried	324	95.6			

Majority of the students were unmarried (N=324, 95.6%), resided in the hostel (N=286, 84.4%), and their family income per month was 41000-50000 (N=111, 32.7%) (Table 5.1.1)

5.2 Descriptive statistics of the level of perceived stress

Descriptive statistics of the level of perceived stress are mentioned in table 4.2.

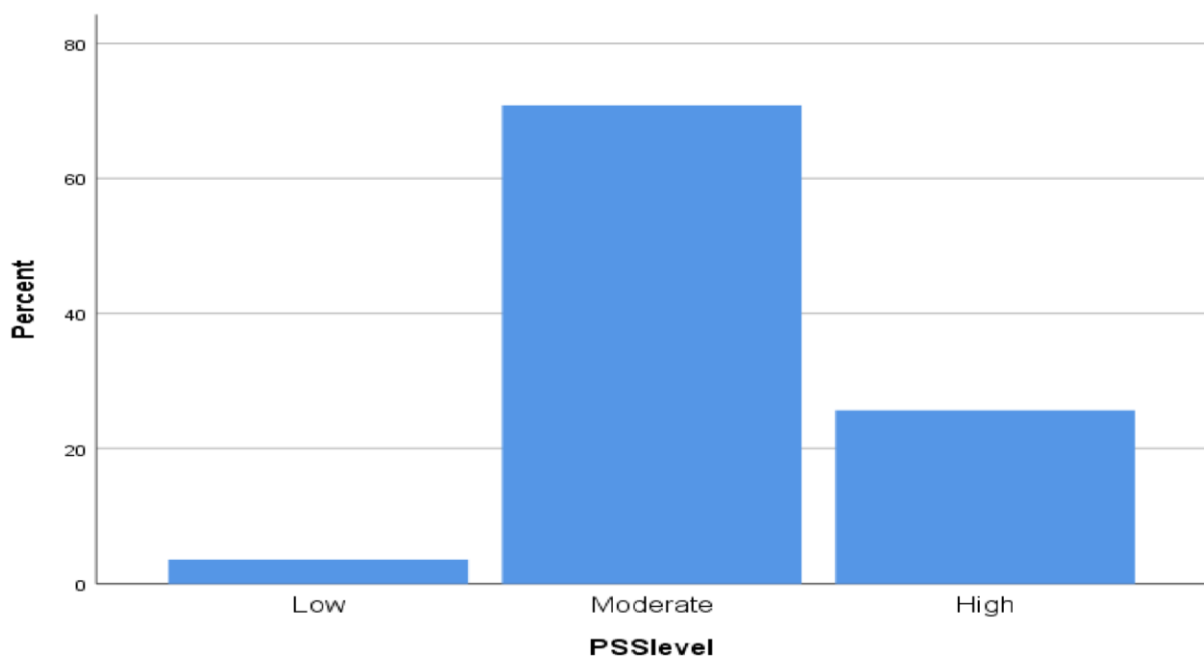
Table 5.2.1 Descriptive statistics of the level of perceived stress for students.

PSS level	N	%
Low stress	12	3.5

Moderate stress	240	70.8
High perceived stress	87	25.7

The MSS of the whole population was 22.91(SD=5.386) which represents moderate level of stress. Majority of the students presented a moderate level of stress (N=240, 70.8%). Second most of the students presented a high perceived stress (N=87, 25.7%). There were 12 (3.5%) students showed low level of stress.

Figure 5.2.2 illustrate the percentages of perceived stress of students by the PSS levels.



5.3 The affecting factors due to current economic crisis

The main categories of affecting factors due to current economic crisis were analyzed.

Table 5.3.1 frequency of undergraduates have stopped taking printouts and instead of that they were writing themselves due to current economic crisis.

	N	%
Does not apply to me at all	24	7.1
Apply to me to some degree	102	30.1
Apply to me to a considerable degree	109	32.2
Apply to me very much	104	30.7

According to the results there was a considerable effect on undergraduates when they were taking printouts and instead of that writing themselves (N=109, 32.2%).

Table 5.3.2 frequency of undergraduates who have difficulties to buy books, pens, papers, highlighters, etc.

	N	%
Does not apply to me at all	15	4.4
Apply to me to some degree	83	24.5
Apply to me to a considerable degree	155	45.7
Apply to me very much	86	35.4

More than 1/3 of the students have difficulties in a considerable degree (N=155, 45.7%). Minimum amount of students has not difficulties to buy stationery items (N=15, 4.4%). It was less amount. 25.4% percentage of students had very much difficulties (N=86).

Table 5.3.3 frequency of undergraduates who were thought to take two meals per day.

	N	%
Does not apply to me at all	52	15.3
Apply to me to some degree	95	28.0
Apply to me to a considerable degree	95	28.0
Apply to me very much	97	28.6

There were not considerable changes among the students. Nearly 1/3 of students had thought to take two meals per day (N=97, 28.6%). 15.3% percent of students had not applied the above statement (N=52).

Table 5.3.4 frequency of undergraduates who were thought to cook meals themselves without buying outside.

	N	%
Does not apply to me at all	31	9.1
Apply to me to some degree	68	20.1
Apply to me to a considerable degree	101	29.8
Apply to me very much	139	41.0

More than 1/3 of students have thought to cook themselves without buying outside (N=139, 41.0%). Less number of students reported, they have not thought to cook (N=31, 9.1%).

Table 5.3.5 frequency of undergraduates who were decided to get seasonal ticket and use public transportation instead of using own vehicles.

	N	%
Does not apply to me at all	37	10.9
Apply to me to some degree	61	18.0
Apply to me to a considerable degree	118	34.8
Apply to me very much	123	36.3

Many of the students have trend to buy seasonal ticket and use public transportation (N=123, 36.3%). More than 1/3 of students had affected in considerable degree (N=118, 34.8%). 37 students had not affected the above statement (10.9%).

Table 5.3.6 frequency of undergraduates who were thought to stop going outings with their friends.

	N	%
Does not apply to me at all	23	6.8
Apply to me to some degree	67	19.8
Apply to me to a considerable degree	131	38.6
Apply to me very much	97	28.8

118(34.8%) students had affected very much of going outings with their friends and 131(38.6%) students had affected it considerable degree due to current economic crisis. Less number of students had not stopped their outings with friends (N=23, 6.8%).

Table 5.3.7 frequency of undergraduates who were unable to enjoy their free time with his/her boyfriend/girlfriend.

	N	%
Does not apply to me at all	56	16.5
Apply to me to some degree	72	21.2
Apply to me to a considerable degree	106	31.3
Apply to me very much	105	31.0

Maximum students had affected by considerable degree (N=106, 31.3) and it was nearly 1/3 from overall responses. Nearly 1/3 of students had affected it in very much (N=105, 31.0%). 56(16.5%) students had able to enjoy with his/her, boyfriend/girlfriend.

Table 5.3.8 frequency of undergraduates who were thought to stop going home frequently.

	N	%
Does not apply to me at all	22	6.5
Apply to me to some degree	61	18.0
Apply to me to a considerable degree	103	30.4
Apply to me very much	153	45.1

That statement has applicable to 103 (30.4%) students in considerable degree and 153 (45.1%) students very much. Nearly half of the students had affected their frequent visit of home. Then they have stopped their frequent visit due to current economic crisis.

Table 5.3.9 frequency of undergraduates who were thought to save their extra expenditure money.

	N	%
Does not apply to me at all	10	2.9
Apply to me to some degree	62	18.3

Apply to me to a considerable degree	83	24.5
Apply to me very much	184	54.3

More than half of the students had thought to save their extra expenditure money and it was the majority from responses (N=184, 54.3%). Only 10(2.9%) students had not thought to save their extra expenditure money.

Table 5.3.10 frequency of undergraduates who were stopped frequent shopping for dresses, cosmetics, jewellery, etc.

	N	%
Does not apply to me at all	15	4.4
Apply to me to some degree	68	20.1
Apply to me to a considerable degree	114	33.6
Apply to me very much	142	41.9

Many of the students had stopped the frequent shopping (N=142, 41.9%) and 15(4.4%) students have able to continue their frequent shopping for dresses, cosmetics, jewelry, etc.

Table 5.3.11 frequency of undergraduates who had to spend more money for the internet communication.

	N	%
Does not apply to me at all	32	9.4
Apply to me to some degree	85	25.1
Apply to me to a considerable degree	118	34.8
Apply to me very much	104	30.7

According to the third and fourth raw results, students had spent more money for internet communication due to current economic crisis (N=118, 34.8%, N=104, 30.7). Less number of students had not spent more money for the internet communication (N=32, 9.4%).

Table 5.3.12 frequency of undergraduates who were thinking that, they have poor academic performance due to economic crisis.

	N	%
Does not apply to me at all	34	10.0
Apply to me to some degree	89	26.3
Apply to me to a considerable degree	134	39.5
Apply to me very much	82	24.2

Considerable degree of students has poor academic performance due to economic crisis (N=134, 39.5). It was more than 1/3 of responses. Only 10% (N=34) percentage of students had not poor academic performance due to economic crisis.

5.4 The relationship between demographic factors and perceived stress level

Table 5.4.1: Correlation and its significance of the demographic factors on the perceived stress

Variable	Low	Moderate	High	N	%	P-value	Df	Chisquare value
Age								
20	1	7	4	12	3.5			
21	1	14	16	31	9.1			
22	0	27	15	42	12.4			
23	3	33	12	48	14.2			
24	5	59	9	73	21.5	0.01	16	48.1
25	1	54	8	63	18.6			
26	1	35	11	47	13.9			
27	0	9	10	19	5.6			
28	0	2	2	4	1.2			
Gender								
Female	6	103	29	138	40.7	0.238	2	16.7
Male	6	137	58	201	59.3			
Stream								
Nursing	10	86	35	131	38.6			
Medicine	2	154	52	208	61.4	0.004	2	16.7
Academic intake/batch								
2015/2016(11 th MBBS)	1	20	9	30	8.8			
2016/2017(10 th NUR/12 th MBBS)	1	28	16	45	13.3			
2017/2018(11 th NUR/13 th MBBS)	4	59	7	70	20.6			
2018/2019(12 th NUR/14 th MBBS)	2	72	3	77	22.7	0.000	10	33.3
2019/2020(13 th NUR /15 th MBBS)	0	32	10	42	12.4			
2020/2021(14 th NUR/16 th MBBS)	4	29	42	75	22.1			
Marital status								
Married	0	11	4	15	4.4			
Unmarried	12	229	87	324	95.6	0.575	2	33.3
Family income per month								
<40000								
41000-50000								
51000-60000								
>60000	6	42	15	63	18.6			
	4	61	46	111	32.7			
	1	76	15	92	27.1	0.000	6	33.3
	1	61	11	73	21.5			

No of siblings								
0	1	39	10	50	14.7			
1	1	74	33	108	31.9			
2	5	65	24	94	27.7			
3	4	36	16	56	16.5	0.123	12	52.4
4	0	15	4	19	5.6			
5	1	9	0	10	2.9			
6	0	2	0	2	0.6			
Mahapola/Bursury								
Have	4	107	52	163	48.1			
Have Not	8	133	35	176	51.9	0.030	2	0.00
Residence								
Home	3	18	4	25	7.4			
Hostel	8	204	74	286	84.4			
Boarding house	1	18	9	28	8.3	0.263	4	22.2

^ P value <0.05: statistically significant

When considered the relationship between the perceived stress level and the age, there was a significant relationship between perceived stress level and the age(P=0.01).

The research was found that there was no significant relationship between the perceived stress level and the gender(P=0.238).

There was a significant relationship between the perceived stress level and the stream of study(P=0.04). Medicine students had more stress than nursing students.

There was significant relationship between the perceived stress level and academic intake/batch(P=0.00). The students of 2018/2019 batch had more stress level than other academic years. The study was showed that there was no any relationship between the perceived stress level and marital status.

The research findings showed that significant relationship between the perceived stress level and the family income (p=0.00). Less family income per month students (33.3%) had more stress than the students who got more family income per month.

According to this study there was no any significant relationship between the perceived stress level and no of siblings.

From the study could identify significant relationship between the perceived stress level and the students who got mahapola/bursury or not. The students who were not getting mahapola/bursury had more perceived stress than the students who were getting mahapola/bursury (P=0.030).

There was no any significant relationship between the perceived stress level and residence.

6. Discussion

The study intended to assess the level of perceived stress and affecting factors due to current economic crisis among the students of FHCS, EUSL. Through this study, we were able to discover that the mean stress score (MSS). The finding shows that majority of students had moderate stress and there was a significant positive correlation detected between family income per month and perceived stress.

Strengths

- Our study was strengthened by several acts throughout the process from the design of the study and data collection.
- The study design we selected is one of the best to achieve our objectives. The perceived stress level was assessed in the study. Majority of the students had moderate stress due to current economic crisis.
- The study covered the all nursing and medical students in FHCS, EUSL. Therefore, we believe the study represents the faculty as a whole.
- Before and during the research, an extensive literature survey was done. No published studies from Sri Lanka on the stress level of students due to recent current economic crisis. Hence, this is perhaps the first of such studies in Sri Lanka.

Limitations

- Due to limited time availability we had to finish data collection within short period.
- Some of the study participants may not willing to expose family income.
- Due to online survey, respondents may not feel encouraged to provide accurate, honest answers.
- Participants are less likely to stay fully engaged for a survey of more than 8-10 minutes than with other research method.

Chi-Square and correlation has applied for perceived stress level to verify their association with demographics. According to our study there was a statistical significant relationship between undergraduate perceived level of stress with age, academic stream, academic year. Family income per month, and either Mahapola or Bursary receiving. In the similar study was conducted among undergraduate students in Greece. The studied variable on the undergraduate perceived level of stress which was related to collage activities, gender, year of study, residence & family income per month(Mouza, 2015). The similar study was conducted in Korea, among those students there was a relationship with finance, academic requirements and housing(Oh et al., 2011).

Considering gender, it is clear that the male students experienced a higher level of stress than female students. It may be due to usage of motorbikes, wasting money than female students and outings with friends more than females. A study done in Nigeria has revealed that male undergraduates express a significantly higher level of stress than females (Aihie & Ohanaka, 2019). Likewise, a study conducted in Ghana, male students were found to experience a high level of stress than females (Azilla et al., 2015) as well as Khan et al (2015) also found that the same results.

But the findings are consistent with those of relevant studies quoting that stress levels in female students were significantly higher than those in males(Shamsuddin et al., 2013). Similar study has done by Stallman, 2010 and Blanch et al., 2008. There was a study done among the undergraduate student of Grece due to economic crisis. It was found that regarding commonness and severity female's seniors and with the low family income(Mouza, 2015).

On the other hand, Guo et al (2011) reported similar levels of economic stress between females and males during unstable economic conditions.

The study shows that high level of stress among the first year undergraduates and there was a statistical significant between academic year and the stress level. According to similar studies researchers found that first year undergraduate students were experiencing high level of stress(Yaffe, 1998). This may be because first year students still do not experience too much academic work load. They may have not ability to manage their expenditure with the new university life and environment.

There was a statistically significant relationship between family income per month and perceived stress level. There was high stress among students who were from middle class family. Their family income has affected by the current economic crisis and it also lead to affect their children lives. The study who were with high family income per month had low level of stress. Therefore, financial problems contribute a lot to high level stress. Even if the students from all socio-economic backgrounds are selected to the university, all the students do not equally enjoy all the resources needed for a fairly better life in the university. According to the interviews and focus group discussions carried out with students of the University of Colombo, it was revealed that students who join the university life compared to other students (Mahees, 2020). These economic hardships pressurize them, and they go under stress. Furthermore, a Pakisthanian study by Yahya F(2013), America study by Heckman et al (2014), and Alisia et al (2018) also affirm that financial problems are mostly affecting the stress among university students. That similar outcomes were observed in previous studies (Demirbatir, 2012; Stallman, 2010; Andews and Wildin, 2004). Marjonovic et al (2013) has concluded that bad economic status is positively related to stress. Bennett(2003) also observed that financial hardship prompts students, particularly the ones with low grades, to quit their studies. Many of the students had not received Mahapola or bursary and they had high level of stress. Sometimes some students who do not receive either Mahapola or bursary grand due to the permanent monthly income of their parents. Although their parents are government employees with a permanent monthly salary, the family undergoes many economic hardships with the expenses towards the studies of other children or sick person in the family. Mahees (2020) from University of Colombo also reported that the same findings.

In our study, there was a high stress among the undergraduates who have siblings. In the study which was conducted in University of Colombo had showed that parents have economic hardships with the expenses towards the studies of other children (Mahees, 2020). Then that affect the undergraduates' studies also. They may have to quit their studies also.

Due to current study, there was a high stress among students who were in hostel. They have left their home during their studies and they are living in hostel. Then they have to manage themselves. They may have to provide their foods themselves by cooking or from taking outside. In addition, stress can occur due to inadequate space in hostel room and new environment. Mainly this lead to first year students. Food in the hostel canteen is not tasty and many students buy from outside the university, but economically poor students lose their opportunities and go under stress. The similar study has conducted in University of Colombo had revealed that high stress among the students who were in hostel (Mahees, 2020).

Due to our study, there was a moderate stress among the majority of the students (70.8%). But in the similar study, it was higher among the students(Mouza, 2015).

The descriptive statistics was done to identify the affecting factors due to current economic crisis. Due to that many factors were identified. In our study considerable amount of undergraduates who had difficulties to buy stationary. In addition, they had difficulty to use private transportation. It may be due to hikes fuel prices and fuel shortage in the country. Students had decided to get seasonal ticket and use public transportation. Because it may help them to save their money. In the study was conducted among the undergraduate students of University of Calabar had difficulty to get pocket money to meet their needs, as student missed lectures because of lack of transport fares to university(Ofoegbu et al., 2021).

The affecting factors due to current economic crisis showed that high percentage of the students have responded that they have thought to stop taking printouts and instead of that they have written themselves. In the study of Mahees (2020) had showed that the students have to spend money on taking printouts and

they have difficulties. With the current price of the papers and for the printouts, students have to spend more money for that.

Undergraduates have to spend money to computer typing, buying important books, and stationary. According to our study considerable amount of student had responded that they have difficulties to buying stationary. Now a day those prices have increased and with the other necessary expenses undergraduates may have difficulty. Whereas a study by Mahees (2020) from University of Colombo emphasized that students have difficulties to purchase for their stationary due to economic crisis. Based on the findings of the study students had poor academic performance due to economic crisis in 39.5% considerable degree and 24.2% very much degree. According to that economic crisis had influenced the academic performances. This may be due to stress with the current economic crisis. Then similar study had revealed that economic recession influences the academic performance of the students as well as their psychological adjustment (Ofoegbu et al., 2021).

7. Conclusion & Recommendation

Conclusion

The undergraduates in Sri Lankan universities experience various issues & challenges due to the student's personal life & problems in the education system. Especially, the current economic crisis has affected the family income. So affected undergraduates also. Because mainly they depend on their parents. Therefore, this is accompanied by positive and negative emotional experiences and it is led to increase level of stress among undergraduates.

This study unidentified perceived stress level and affecting factors due to current economic crisis of undergraduates Faculty of Health-Care Sciences, Eastern University Sri Lanka. The student's group had a moderate level of stress. Male students had a higher level of stress than female students. The type of academic streams has effects on the stress among students.

The responsible person need to identify the most suffering students due to economic crisis and they have responsibility to arrange the supports to them to overcome from the stress. University academic staff should identify the students who have poor academic performance due to current economic crisis and should focus on them.

Recommendation

Faculty need to develop trusting, supportive relationships with students.

University management should consistently plan suitable activities or programs for the students such as organizing talks on financial management, motivation, family problems especially topics on managing stress.

There should be a student counselor committee whose purpose is not only providing counseling related to the studies but also solve problems that students face.

Faculty should implement comprehensive stress management programs during students first-year and continue until graduation.

Student should encourage to identify other factors and sources of stress especially related to academic and environmental factors.

Student should be arranged the free Wi-Fi connection in the faculty premises also.

Academic staff should take action to get continuous Mahapola/bursury monthly.

Arrange the possible scholarships who has poor financial states.

Arrange transportation facilities to go clinical practices.

9. References

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