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Assessment of level of academic stress and stress coping style on impact of lockdown COVID 19 among nursing students at SRM college of Nursing, Chengalpattu (dt)

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Article History:	ABSTRACT Check for updates
Received on: 05 Sep 2020 Revised on: 05 Oct 2020 Accepted on: 10 Oct 2020 <i>Keywords:</i>	As we all know that lockdown has been announced in the county due to coro- navirus which has obstructed students in their studies. In today's highly competitive world, students face various academic problems including exam stress, disinterest in attending classes, and the inability to understand a sub-
Academic stress, stress coping style, nursing student, impact, lockdown	ject. Academic stress is becoming increasingly common and widespread among adolescents. This study investigated the academic stress and stress coping strategies on impact of COVID 19 lockdown experienced by the stu- dents at University. The sample was drawn through convenient sampling technique and consisted of 250 adolescents studying in the selected colleges at Kattankulathur. Data obtained were analyzed using descriptive statistics, correlation. Results showed that the correlation value -0.167 is highly signifi- cant since the p-value is less than 0.01 hence, we can say that there is a highly significant negative correlation between Academic Stress and Coping Strate- gies". This study concludes that, if the academic stress score increases then the coping strategy score will be decreasing and vice versa.

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INTRODUCTION

The modern coronavirus that triggers the COVID-19 respiratory disease has ended countless lives, and students at the college are no exception. But the additional burden put on students during home quarantines has left some struggles to control their mental well being, social isolation and missed milestones including graduation. The corona virus shutdown not only takes lives, but the pandemic situation leaves us nervous and stressed (Kerr, 2020). Change is stressful, and stress contributes to anxiety, adversely impacting our mental and physical health (Pruitt, 2020). Stress is a common part of college life, and many students who are away from home become depressed and will be responsible for doing well in academic terms. Little stress is too good for students because it motivates the students to resolve certain difficulties. Today we take a closer look at some of the most common cause of stress among college students so you're able to manage even the most stressful situations (The Haven at college, 2019).

Stress may be a very common disorder featuring the scholars typically found in items that are frightening, violent, upsetting, threatening to be competitive, unpredictable, and confusing. The proportion of suicides among school students is considerable compared to the others and these suicides area units are mainly related to educational failure or under achievement (Ramya and Parthasarathy, 2009). Academic stress is mental and emotional strain, anxiety, or stress, due to school or college life demands. It is increasingly prevalent among adolescents (Garcia, 1986; Gupta, 1989). In today's competitive environment, teenagers face a life full of pressures. Typically, they have a high academic burden, low satisfaction with their academic performance, and high expectations and will suffer more academic stress. Academic stress is a huge stressor for many students (Hashim, 2003).

Academic stress means stress relating to schooling. It is the principal cause of stress that students face. Some students also feel frustrated. Academic pressure related to their scholastic success less to contentment. And had to research the high outer saddle, and may experience more educational stress. To deal with it requires spending your own concentrated effort, solving personal and interpersonal issues to try and conquer it. Minimize tension and conflict, or accept it. Mechanisms for psychological coping are generally referred to as coping mechanisms or skills (Rao, 2012; Rajendran and Kaliappan, 1990; Hussain *et al.*, 2008).

According to India Today (07 Apr 20) Major educational problems currently facing students and educators as a result of the Covid-19 pandemic are student education outcomes withheld as a result of the Covid-19 pandemic. (Subramani and Kadhiravan, 2017) conducted the study between academic stress and students of mental health. Result indicates that academic stress and mental well being are associated and that the learning structure is crowded upon by students. Parents and schools are exerting too much pressure on the students to achieve the higher grades that deter students, adding that there is sufficient guidance from parents and schools (Cohen et al., 1994). In view of the above topic we conducted the current study at selected college to evaluate academic stress and level of stress coping style during pandemic among adolescents.

MATERIALS AND METHODS

Quantitative approach and descriptive co-relational design were adopted for the present study. The variables studied are study variables and demographic variables. The study variables were academic stress and stress coping style, whereas the demographic variables includes age, gender, course, year of study, religion, living area, educational status of the father & mother, occupation of the father & mother, family monthly income, type of device used for the online class and type of network connection. The study was conducted among students of SRM College of

Nursing, Kattankulathur. Sample consisted of students who fulfilled the inclusion criteria. The sample size was 250. Non-probability Purposive sampling technique was adopted to select the samples for the study. The tool used for the data collection comprises of 3 sections. Section A- Structured questionnaire to elicit the demographic data. Section B - A standardized 40 item rating scale to assess the academic stress was used which was firstly established by Kim (1970) and adopted to Indian context by ⁹. Every item has five alternative response i.e ,"No Stress", "Slightly Stress", "Moderate Stress", "Highly Stress" and" Extremely High Stress". Each response transmits a score of '0', '1', '2', '3' and '4' individually. Section C: - A standardized 5-point Likert Stress Coping Style Inventory (SCSI) of students at Universities and Colleges of Technology by Ying Ming Lin & Farn Shing Chen (2010) was used. Coping strategies are split into Problem-Focused coping and Emotional- Focused Coping. The SCSI tool consist of 20 items ranging from "completely agree" - '5' to "completely disagree" - '1'. The content of the tools was established on the basis of opinions of Nursing experts. Suggestions were incorporated in the tool. The reliability of the tools was established by test retest method for academic stress scale and for SCSI scale Cronbach reliability method was used. The r value was 0.82 and 0.83 respectively which showed a positive co-relation.

Ethical considerations

The study was approved by the dissertation committee of SRM College of Nursing, SRMIST Kattankulathur, Chengalpattu District. Permission was obtained from the Dean, SRM College of Nursing and informed consent was obtained from each participant for the study before starting data collection. Assurance was given to the subjects that anonymity of each individual would be maintained and they are free to withdraw from the study at any time. The investigators explained the objectives and methods of data collection. Data collection was done during the lockdown period and online classes were scheduled. The data collection was done using Google Forms link which was created and was posted through WhatsApp class group for the students. Details about the study was explained to the samples and their consent was obtained. The confidentiality about the data and finding were assured to the participants. The data was analyzed using descriptive and inferential statistics.

RESULTS

Table 1 shows that 51.4% students age belongs to (19-20), 83.8% students are female (207), 85.4%

S. No.	Demographic Variables	Class	No. of respondents	Percentage
1	Age in years	17 – 18	62	25.1%
		19 – 20	127	51.4%
		21 – 22	45	18.2%
		23 – 24	5	2.0%
		> 24	8	3.2%
2	Gender	Male	40	16.2%
		Female	207	83.8%
3	Course	DGNM	25	10.1%
		B.Sc (N)	211	85.4%
		P.B B.Sc (N)	4	1.6%
		M.Sc (N)	7	2.8%
4	Year of the study	l year	93	37.7%
		ll year	48	19.4%
		lll year	61	24.7%
		IV year	45	18.2%
۲.	Poligion	Hindu	195	78.9%
5	Kengion	Christian	44	17.8%
		Muslim	7	2.8%
		Others	1	0.4%
			_	
6	Living area	Urban	100	40.5%
-	0	Semi – Urban	46	18.6%
		Rural	101	40.9%
7	Educational status of	Profession or honors	11	4.5%
	father	Graduate	42	17.0%
		lintermediate (or) diploma	22	8.9%
		High school certificate	73	29.6%
		Middle school certifi- cate	58	23.5%
		Primary school certifi-	25	10.1%
		cate		
		Illiterate	16	6.5%
g	Educational status of	Profession or honors	14	5.7%
0	mothor	Graduate	35	14.2%
	moulei	Intermediate (or)	14	5.7%
		diploma		
		High school certificate	70	28.3%
		Middle school certifi-	46	18.6%
		cate		
		Primary school certifi-	43	17.4%
		cate		
		Illiterate	25	10.1%
0	Occupation of the father	Legislator senior offi-	13	5 3%
9	occupation of the father	cials and managers	10	5.570
		Professionals	31	12.6%

Table 1: Frequency percentage distribution of demographic variables of nursing students N=250 $\,$

Continued on next page

Table 1 con	tinued			
S. No.	Demographic Variables	Class	No. of respondents	Percentage
		Technicians and asso- ciate professionals	10	4.0%
		Clerks	6	2.4%
		Skilled agricultural and fishery workers	49	19.8%
		Craft & related trade workers	6	2.4%
		Plant & machine opera- tors and assemblers	16	6.5%
		Elementary occupation	20	8.1%
		Skilled workers & shop	68	27.5%
		makers		
		Unemployed	28	11.3%
10	Occupation of the	Legislator, senior offi- cials and managers	3	1.2%
	moulei	Professionals	16	6.5%
		Technicians and asso- ciate professionals	4	1.6%
		Clerks	4	1.6%
		Skilled agricultural and	16	6.5%
		fisherv workers	-	/ -
		Craft & related trade workers	4	1.6%
		Plant & machine opera-	0	0.0%
		Elementary occupation	12	4.9%
		Skilled workers & shop	16	6.5%
		makers	10	
		Unemployed	172	69.6%
11	Family monthly income	RS: 126.360	18	7.3%
11	ranning monenty meetine	RS: 63,182 -126,356	11	4.5%
		RS: 47,266 - 63,178	26	10.5%
		RS: 18,953 - 31,589	56	22.7%
		RS: 6327 - 18,949	93	37.7%
		< 6323	43	17.4%
12	Type of device used for	Laptop	13	5.3%
	the online class	Computer	4	1.6%
		Smart phone	229	92.7%
		IPAD	1	0.4%
13	Type of network	Wi-Fi connection	35	14.2%
10	connection	Mobile data	208	84.2%
		Any others	4	1.6%
14	Do vou have network	Yes	197	79.8%
	connection problem	No	50	20.2%

students are BSc Programme (211), 37.7% students belongs to I year (93), 78.9% students belong to Hindu religion, 40.9% students belong to rural area (101), 29.6% student father belong to higher school certificate (73), 28.3% % student mother belong to higher school certificate (70), 27.5% student father occupation belongs to shop keeper (68), 69.6% student mother occupation belongs to Home maker (117), 37.7% students' parents occupation belong to RS: 6327 - 18,949 (93), 92.7% of student using smart phone for online classes (229), 84.2% student using mobile data for connection (208), 79.8% students having network issue (197).

Table 2 above indicates that 37.7% (93) of students without stress, 27.9% (69) of students with moderate stress, 24.7% (61) of students with mild stress, 6.9% (17) of students with high stress, 2.8% (7) of students with severe stress.

Table 3 above indicates that 50.2% (124) of students with strong stress coping style, 34.8% (86) of students with outstanding stress coping style, 13.0% (32) of students with average stress coping style, 1.2% (3) of students with better stress coping style, 0.8% (2) of students with bad stress coping style.

From the above Table 4, therefore, it indicates that the correlation value -0.167 is highly important because the p value is less than 0.01, so we can conclude that there is a strong negative association between academic stress and coping strategies. It means that if the academic stress score increases then the score for the coping strategy will decrease and vice versa.

Association between demographic variables and academic stress level indicates that the p values referring to the demographic variables are not important at a level of 5 percent as they all are not less than 0.05 so we can assume that there is no meaningful association between demographic variables and academic stress level. Association between demographic variables and level of stress coping style shows that the P value corresponding to the demographic variable "Age" is highly significant at 1 per cent level as it is less than 0.01 thus, we may conclude that there is a high significant association between "age" and level of coping strategies. In other words, the demographic "age" factor significantly affects the "coping strategies". The P value corresponding to the demographic variable "Course of study" is also highly significant at 1 percent level because it is less than 0.01 hence, we can conclude that there is a strong significant correlation between "Path" and the level of coping strategies. That is, the "course of research" demographic factor significantly influences the "coping strategies".

Similarly, the P value referring to the demographic variable "Mother's Occupancy" is highly significant at 1 percent level as it is less than 0.01 hence, we may assume there is a strong significant correlation between "Mother's Occupancy" and the level of coping strategies. That is to say, the demographic factor "Mother's profession" strongly affects the "coping strategies."

The P value corresponding to the demographic variable "Network link type" is important at a level of 5 percent as it is less than 0.05 hence, we can assume there is a substantial correlation between "Network link type" and coping strategies level. That is to say, the demographic factor "Network link type" has a strong impact on the "coping strategies. All other P values are not important at a level of 5 percent as they are not less than 0.05 hence we may assume that there is no significant association between the demographic variables' Sex, Year of Study, Religion, Living Place, Father's Educational Status, Father's Occupancy, Monthly Family Income, Type of computer used for the online class, Do you have network connection problem" and the "Level of coping strategies".

DISCUSSION

People with medical emergencies can have psychological effects like stress, anxiety on the students. With COVID19 having psychological impact such as anxiety and distress on college students 12. The study aimed to evaluate the academic stress and coping strategies adopted by the Nursing students during COVID 19 pandemic.

To assess the level of academic stress and stress coping style on impact of lockdown COVID 19 among nursing students. Hence in this study it shows that 51.4% students age belongs to (19-20), 83.8% students are female (207), 85.4% students are BSc Programme (211), 37.7% students belongs to I year (93), 78.9% students belong to Hindu religion, 40.9% students belong to rural area (101), 29.6% student father belong to higher school certificate (73), 28.3% % student mother belong to higher school certificate (70), 27.5% student father occupation belongs to shop keeper (68), 69.6% student mother occupation belongs to Home maker (117), 37.7% students' parents occupation belong to RS: 6327 - 18,949 (93), 92.7% of student using smart phone for online classes (229), 84.2% student using mobile data for connection (208), 79.8% students having network issue (197). In his study Bataineh (2013) measured the academic stressors experienced by university students. The results of the analysis showed that there is an unreasonable aca-

S. No.	Level of Academic Stress	No. of respondents	Percentage
1	No Stress	93	37.7%
2	Slight Stress	61	24.7%
3	Moderate Stress	69	27.9%
4	High Stress	17	6.9%
5	Extreme Stress	7	2.8%

Table 2: Level and percentage distribution among nursing students of academic stress N=250

Table 3: Frequency and percentage distribution among nursing students of the level of coping strategy N=250

S. No.	Level of Coping Strategies	No. of respondents	Percentage
1	Very Poor Stress Coping Style	3	1.2%
2	Poor Stress Coping Style	2	0.8%
3	Fair Stress Coping Style	32	13.0%
4	Good Stress Coping Style	124	50.2%
5	Excellent Stress Coping Style	86	34.8%

Table 4: Correlation Analysis between Academic stress score and Coping strategy scores N=250

S. No.	Variable	Ν	Mean	SD	R Value	P Value
1	Academic Stress	247	51.82	33.076	-0.167	0.009**
2	Coping Strategies	247	104.32	19.505		

demic overload, insufficient time to study due to the vast content of courses covered, high family expectations and low levels of motivation are some of the reasons for the stress. Fear of failure is the primary cause of stress, too. There was no significant difference from different specializations found among the students.

Correlates the level of academic stress and stress coping style among nursing students on the impact of COVID 19 lockdown. The correlation value -0.167 is very significant as the p value is less than 0.01 so we can say there is a high negative correlation between academic stress and coping strategies. It means that, if the academic stress score is increase then the coping strategy score will be decreasing and vice versa. (Savitsky et al., 2020) conducted a cross-sectional study during the third week of a national lockdown amongst all 244 students in the nursing department. The level of anxiety was assessed using the 7-Item Scale Generalized Anxiety Disorder with a cut-off point of 10 for moderate and 15 for serious anxiety. Analysis of factor was used to identify components for the coping. The prevalence of moderate and severe anxiety was respectively 42.8 per cent, and 13.1 per cent. Gender, lack of PPE, and fear of infection were associated significantly with a higher anxiety score. Stronger resilience and humor use were associated with significantly lower levels of anxiety, and mental disengagement with higher levels of anxiety (Savit-sky *et al.*, 2020).

Associate the level of academic stress and style of stress coping with their selected demographic variables to the impact of lockdown COVID 19 among nursing students. In Times of Covid-19 Lockdown, (Rehman et al., 2020) conducted a study on Depression, Anxiety and Stress among Indians. The results indicated that the most affected were people who do not have sufficient supplies to sustain the lockdown, and family affluence was found to be negatively correlated with stress, anxiety, and depression. Students and healthcare professionals have been found to experience more stress, anxiety and depression than others among various professions. Despite the current situation, stress, anxiety and depression have been found to be within normal ranges for mental health professionals that emphasize their ability to remain normal in times of distress.

CONCLUSION

In this study, it concludes that the correlation value -0.167 is highly significant as the p value is less than 0.01, so we can say that there is a significant negative correlation between academic stress and coping

strategies. This study concludes that if the academic stress score increases then the score for the coping strategy decreases and vice-versa.

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Conflict of Interest

The authors declare that they have no conflict of interest for this study.

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