



Stress Among Pharmaceutical Students – with Special Reference to SRM University

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Accepted on: 15-05-2016; Finalized on: 30-06-2016.

ABSTRACT

The students pursuing higher education are under stress due to various factors, like academic stress, language barriers, work pressure. This article has two primary aims. Firstly, it provides a in depth review of previous studies into student stress and identifies several important issues that, as yet, have not been explored. There has been no consideration of the effect of students maturing during their studies on the stress that they experience and how they cope with that stress. Secondly, the article highlights limitations in the past and present literature base, where there has been a concentration on a quantitative approach, and focus on a narrow range of subject groups. There is also a need to undertake horizontal research to investigate individuals' stress experiences during the period they study at university. Overall the key assertion here is that thus far research into student stress has not offered a complete account and explanation of students' stress experiences. This study will be done with special reference to the students studying in SRM University. The outcome of the study will provide the solution of stress management to those students who are under stress.

Keywords: Students, Stress, Pharmaceutical Education, Well Being, University.

INTRODUCTION

Stress is the body's reaction to physical, chemical, emotional, or environmental factors. These can range from extreme, life-threatening situations to the simple and everyday challenges of life. Stress are a force constantly affecting all human beings. It is part of everyday life and is unavoidable, but we can choose how we respond to stress. Stress is provoking event which spoils the health of a human and demotivates him to be a successful person in life.

Stress is an unavoidable part of life everybody meet with stress in his/her life; it can take a toll on students physical health, mental health, and academic success and even on every part of life unless they discover to cope with it appropriately.

Young students should have everything to be happy about, but as the generation with the least responsibility actually experience the most stress.

Students juggle part time jobs with university, worry about assignments and stress about the future and how to make the next step is the greatest stress.

Trying to manage all these things at once can leave a student feeling overwhelmed. As a student, every spare minute seems to be filled with worrying. Too much of worries leads to increase in suicide cases and even worse the situations.

It is the duty of the students to come across all barriers and to lead a positive life. Student must set their standards high, but never must expect pure perfection. There are lots of students who are filled with stress when their expectation doesn't meet reality. One of the most

important gifts to give students is a sense of positive self-esteem as they are in a mix of culture. It is important to explore the stress faced by the student community.

Review of Literature

Many researchers studied the stress experienced by students and the demographic factors affecting it. The study of **Hamaideh - 2011**¹ aimed to identify stress and reactions to stress among university students and examine the correlations between student stressors and study variables. The result indicated that the highest group of stressors experienced by students was self imposed stressors followed by pressure. Cognitive responses were found to be the highest responses to stressors experienced by students. **Chen, Wong, Ran and Gilson - 2009**² conducted a study to describe the relationship between college stress, coping strategy and psychological well-being, they used (342) students in (6) universities. The study has proved that psychological well-being has a negative relationship with college stress and a positive coping strategy has significant buffering effects on psychological health problems.

Also they found that the male students reported higher level of stress, worse psychological well-being, and having less inclination towards using positive coping strategies. **Tajularipin, Vizata and Saifuddin - 2009**³ found that (29%) of the students experienced medium stress, and there is a significant difference in the level of stress attributed to gender, and between students in rural and urban secondary schools, the results also indicated that there are many factors influence students' stress such as parenting style, and parents education background.

As any psychological thought in this field, stress has diverse descriptions. **Ibrahim - 1998⁴** defined “stress as a severe emotional response resulted from internal or external change”. According to **Greenberg and Baron - 2000⁵** stresses is personal, physiological and emotional reactions against stimulus. **Hussien and Hussien - 2006⁶** defined it as the state by which the individual undergoes from substantial and mental hyper tension resulted from aspects that can't be gripped and exceeds human aptitude to deal with. Stressors submit to the factors or stimulators that can be source of intellectual or physical pressure. A number of scientists classify these stressors in relation to their intensity, regularity or duration of the **stress** Hussien and Hussien - 2006. **Weightman -1999⁷** categorizes stressors into three major categories: 1) Sudden trauma, 2) chronic stressors and 3) daily irritation.

Hussien and Hussien, 2006 and **Hancock and Szalma - 2008⁸** noted that two common themes exemplify modern stress theory. First, psychological meaningfulness (the most important factor); the attendance of a mechanism through which persons evaluates events in terms of their meaning richness to the mental or physical happiness.

Studies have proved that compared to the general population, medical students are the most distressed students **Lloyd & Gartrell - 1984⁹**. In the Indian scenario; too much content is delivered in a short span of time. In addition to that, students are required to undertake too many examinations. Stress can lead to social insecurity as well as poor academic performance. A pub-med search on stress among medical students in India revealed only one study report **Supe - 1998¹⁰**. This indicates the importance of such studies in the Indian scenario is needed.

Research Design

A questionnaire survey was adopted in this paper. A questionnaire consisting of two sections, including “basic data” and “sources of stress” was developed. A 5.0-item, Likert's 5 point-scale questionnaire was administered to students of **Paramedical pursuing their higher education in SRM University**. The researchers have used a convenience sampling method.

Objectives of the Study

- ❖ To analyze the various factors which tend to create stress
- ❖ To suggest measures to the student community to be stress free for a better life

Statement of the Problem

The purpose of this study is to review some of the common stressors reported by higher education students who are pursuing their study in SRM University.

These students have some common stressors, yet being higher educational students these students seem to have more complex stress than undergraduate students do. Being a student, they have to make the best use of their

academic time for their personal growth and their career growth, but the recent student community faces a lot of problems due to over lapping of stress. Right from health students are affected by the internal and external environment. The influence of the demographic constructs is powerful, it stimulates for the cause of the stress and hence it is important to explore the stress causing constructs.

Research Originality

To exactly identify the stress causing factors with reference to SRM University student community-stress among higher education students – Belonging to the Pharmaceutical Faculty is an original work of the researchers. The students were addressed to determine and know what problems are exactly causing stress. Various interactive conversations with the student community also gave the researchers ample information.

Sample Size and Method

The sample size for this study is 250; the researchers have employed a convenient sampling method to collect data. The primary data were collected from the students and secondary data were collected from reputed data base.

Table 1: Classification of respondent's on the basis of Age

Age Group of the Respondents		Frequency	Percent
Valid	20.00-22.00	68	27.2
	22.01-23.00	135	54.0
	23.01-24.00	27	10.8
	24.01-25.00	14	5.6
	25.01 and above	6	2.4
	Total	250	100.0

Table 2: Classification of respondent's on the basis of Race

Race		Frequency	Percent
Valid	Malay	68	27.2
	Indians	135	54.0
	Chinese	27	10.8
	Africans	14	5.6
	Others	6	2.4
	Total	250	100.0

Table 3: Classification of respondent's on the basis of Gender

Gender		Frequency	Percent
Valid	Male	190	76.0
	Female	60	24.0
	Total	250	100.0

Reliability test

Since this research has utilized proper linkert-type scale it is important to test the internal consistency and the reliability of the questionnaire and thus we employ a Cronbach's alpha test. A total of 29 scale constructs were tested for reliability and the below table clearly shows that the set of constructs used in this study is perfect and highly reliable.

Table 4: Shows the reliability test of factors

Reliability Statistics	
Cronbach's Alpha	N of Items
0.813	29

Table 5: Factors adequacy test and sphericity test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.762
Bartlett's Test of Sphericity	Approx. Chi-Square	277.885
	Df	47
	Sig.	0.000

The above table shows the sample adequacy test by KMO (**Kaiser-Meyer-Olkin**) and **Bartlett's** test. KMO compares the size of the observed correlation coefficient were the size of the partial correlation coefficient for the sum of analyzed variables is 85.4% and is considered to be reliable and thus the research can be proceeded with factor analysis. On the other hand the **Bartlett's** test of sphericity (Ho 1 All correlation coefficients are close to zero) is rejected as the level of significance (**P < 0.0005**) for Approx. The chi-square value is (277.885) and all the coefficients are not close to zero and thus the second acceptance is strong to proceed with a factor analysis as it satisfies both the test to conduct a complete factor analysis.

Total Variance Explained

Table 6: Shows the total factors variances method on factor analysis

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.199	38.619	38.619	11.199	38.619	38.619	8.096	27.916	27.916
2	5.793	19.975	58.594	5.793	19.975	58.594	6.144	21.186	49.102
3	3.508	12.095	70.689	3.508	12.095	70.689	4.154	14.324	63.426
4	2.685	9.258	79.947	2.685	9.258	79.947	2.968	10.235	73.661
5	1.718	5.923	85.870	1.718	5.923	85.870	2.182	7.523	81.184
6	1.538	5.303	91.172	1.538	5.303	91.172	2.147	7.402	88.586
7	1.234	4.255	95.428	1.234	4.255	95.428	1.984	6.842	95.428

Extraction Method: Principal Component Analysis.

Factor Analysis

The first and the foremost initial process in factor analysis is to determine the linear components within the data set i.e., the Eigen values by calculating the Eigen values for R-matrix. **SPSS** extracts factors which has values more than 1 which is acceptable.

Principal component analysis is an important technique to determine the strong patterns in the data set and an important instrument for data reduction is followed. The initial value is 1 by definition and extraction values are more than .5 is usually accepted. In this research the extraction values are high i.e., more than .5 which indicates the proportion of each variables variance. We now proceed with the total variance table.

Justification for not choosing the 7th iteration: since both values falls on a higher scale in the 6th iteration and 7th iteration the highest has to be considered as it is a protocol, and hence the researchers have chosen the 6th iteration.

Finally the rotated component analysis is used to shows the factor loadings for each scale construct. Based on the highest factor loadings each the following names have been given. The factor matrix contains the coefficients which express the standardized variables in terms of the factors. These coefficients, the factor loadings, represent the correlations between the factors and the variables. A coefficient with a large absolute value indicates that the factors and the variables are closely related. The coefficients of the factor matrix can be used to interpret the factors. Although the initial or un rotated factor matrix indicates the relationship between the factors and individual variables, it seldom results in factors that can be interpreted, because the factors are correlated with many variables. In this case, the factors have been rotated so that each factor has significant loadings (more than 0.40) ideally with not more than one variable.

Table 7: Shows the factors extraction method on factor analysis

Factors	Initial	Extraction
Quality of food in mess S1	1.000	.455
High parental expectations S2	1.000	.595
Dissatisfaction with the class lectures S3	1.000	.938
Vastness of Academic curriculum/syllabus S4	1.000	.905
Worry about the future S5	1.000	.995
Lack of entertainment in the institution S6	1.000	.997
Frequency of examinations S7	1.000	.996
Becoming a doctor (expectations on all fronts) S8	1.000	.938
Performance in examinations S9	1.000	.905
Lack of time for recreation S10	1.000	.995
Adjustment with roommate/s S11	1.000	.997
Accommodation away from home S12	1.000	.996
Difficulty in the journey back home S13	1.000	.996
Non-availability of adequate learning materials S14	1.000	.998
Sleeping difficulties (overstrain/disturbances in hostel) S15	1.000	.997
Living conditions in hostel S16	1.000	.996
Lack of special guidance from faculty S17	1.000	.996
Political situation of the country S18	1.000	.998
Competition with peers S19	1.000	.999
Performance in practical's/Clinical postings S20	1.000	.996
Feeling of Loneliness S21	1.000	.996
Relations with the opposite sex S22	1.000	.998
Financial strain (financial instability in the family) S23	1.000	.999
illness affecting performances in class and examinations S24	1.000	.998
Difficulty in reading the text books S25	1.000	.999
Inability to socialize with peers S26	1.000	.998
Family problems (Health related, lack of bonding etc) S27	1.000	.999
Physical disability/limitations S28	1.000	.998
Alcohol/drug abuse S29	1.000	.999

Extraction Method: Principal Component Analysis.

Table 8: Shows the component matrix method on factor analysis: Component Matrix^a

Factors	Component						
	1	2	3	4	5	6	7
Sleeping difficulties (overstrain/disturbances in hostel) S15	.848	-.501	.033	.080	.079	-.116	.011
Lack of entertainment in the institution S6	.848	-.501	.033	.080	.079	-.116	.011
Adjustment with roommate/s S11	.848	-.501	.033	.080	.079	-.116	.011
Family problems (Health related, lack of bonding etc) S27	.837	-.517	.038	.076	.088	-.128	.008
Competition with peers S19	.837	-.517	.038	.076	.088	-.128	.008
Financial strain (financial instability in the family) S23	.837	-.517	.038	.076	.088	-.128	.008
Difficulty in reading the text books S25	.837	-.517	.038	.076	.088	-.128	.008
Alcohol/drug abuse S29	.837	-.517	.038	.076	.088	-.128	.008
Physical disability/limitations S28	.775	.404	-.433	.030	-.175	.124	-.014
Inability to socialize with peers S26	.775	.404	-.433	.030	-.175	.124	-.014

Relations with the opposite sex S22	.775	.404	-.433	.030	-.175	.124	-.014
Non-availability of adequate learning materials S14	.775	.404	-.433	.030	-.175	.124	-.014
Political situation of the country S18	.775	.404	-.433	.030	-.175	.124	-.014
Illness affecting performances in class and examinations S24	.775	.404	-.433	.030	-.175	.124	-.014
Frequency of examinations S7	.035	.680	-.046	.573	.325	-.301	.074
Living conditions in hostel S16	.035	.680	-.046	.573	.325	-.301	.074
Performance in practicals/Clinical postings S20	.035	.680	-.046	.573	.325	-.301	.074
High parental expectations S2	.214	.375	.351	-.328	.085	-.300	-.284
Accommodation away from home S12	.519	.407	.687	-.023	-.267	-.031	.130
Difficulty in the journey back home S13	.519	.407	.687	-.023	-.267	-.031	.130
Lack of special guidance from faculty S17	.519	.407	.687	-.023	-.267	-.031	.130
Feeling of Loneliness S21	.519	.407	.687	-.023	-.267	-.031	.130
Dissatisfaction with the class lectures S3	.329	.302	-.013	.557	.230	.113	.368
Becoming a doctor (expectations on all fronts) S8	.329	.302	-.013	.557	.230	.113	.368
Performance in examinations S9	.475	.413	.088	.591	.258	-.023	-.439
Vastness of Academic curriculum/syllabus S4	.475	.413	.088	-.491	.558	-.023	-.439
Worry about the future S5	.255	-.037	.410	.461	.593	.250	-.196
Lack of time for recreation S10	.255	-.037	.410	.461	.293	.650	-.196
Quality of food in mess S1	.103	-.107	-.068	-.091	.037	.690	.578

Extraction Method: Principal Component Analysis. a. 7 components extracted.

The method for rotation used here is the Varimax procedure.

This is an orthogonal method of rotation that minimizes the number of variables with high loadings on a factor, thereby enhancing the interpretability of the factors. On the basis of Table, 6 components were identified for the 29 variables. Based on the item loadings, these factors were respectively labeled as follows:

1. The factor **“Personal problems and societal influence”** explains the 1st component.
2. The factor **“Low performance and bad environment”** explains the 2nd component.
3. The factor **“No proper care-home sick”** explains the 3rd component
4. The factor **“High expectation and reality outcomes”** explains the 4th component
5. The factor **“Future is a question mark”** explains the 5th component
6. The factor **“No entertainment and health effect due to eating habits”** explains the 6th component

CONCLUSION

This study revealed the various causes for stress among higher educational student community with special reference to SRM University.

This study seemed to be supportive that graduate students have more stress in their lives competing with personal and academic battle.

Though the outer look of the hostel life may be happy but there are various stress faced by the college students living in hostel. Graduate students seem to have more life changes that are occurring while they are in school. Stress cannot be prevented, but there seem to be some interventions available that can be acquired to help these students relieve some the stress they may be experiencing.

Academic, environmental, social and health problems all play an important role in the development of stress. Academic factors are the most important stressors; hence the need for specific and targeted measures to decrease substantially the burden of stress on the students. Teaching techniques and college environments should be adapted to the needs of the students.

The productive utilization of existing student welfare systems, development of more ‘student-friendly’ environments and regular periodic extracurricular activities with universal participation can prove to be useful stress-busters.

Similarly, students living in hostels were observed to be prone to develop stress; thus, a periodic review of hostels, with feedback from the students, should be conducted and the complaints of students should be promptly addressed.

“Life is a battle which has to be won” SRM students must take the pride to be a part of such a famous institution; they must make of all the resources and facilities and must try to cope up with others without facing any stress.



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Source of Support: Nil, Conflict of Interest: None.

