A Survey to Evaluate the Examination Stress of Physiotherapy Undergraduates of Faculty of Allied Health Sciences, University of Peradeniya, Sri Lanka

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Abstract: _Introduction_: _Stress is described as anything that causes a challenge or a threat to our well-beingand stressors are the agents or stimuli in our environment that causes stress. During the years of university life, students are exposed to different kinds of stress, especially during the difficult studying periods like examinations weeks._ _Materials and methods_: _In this analytical study, we intended to evaluate the stress level of physiotherapy students during their semester end examination period in 2017. Level 1000, 2000 and 3000 students (86) were included as the total sample. The students were asked to answer a questionnaire which was focused on their fatigue, atmosphere, handling day to day problems, sleeping patterns, studying patterns, preparation for the exams and the way that they faced for the examination. The data has been collected at the last day of the examination period, i.e. after the examination is over. Participants were answered the questions individually without any interruption._ _Results and discussion_: _There were 30 questions in the questionnaire and four point Likert scale (0= 20%, 1= 40%, 2=60%, 3= 80% stress level) was used to calculate the individual stress values. Mean stress value of the total sample was 44.43 with a standard deviation of 11.77. According to the different study levels, in level 1000, mean stress value was 41.82, level 2000 – 44.77 and level 3000 – 46.55._ _Conclusion_: _Males were more stressed compared to females in total sample. Stress values are increased according as the students were upgrading from level 1000 to 3000. According to the gender and study level, in level 1000 and 2000 males are more stressed compared to females but in level 2000 females are more stresses compared to males._

Keywords: Stress values/ levels, Examination period, Physiotherapy undergraduates

1. Introduction

The word "stress" is generally used when a person feels excess of everything, overloaded and doubtful whether they really can cope with the pressures upon them. Stress is also described as anything that causes a challenge or a threat to our well-being. It is the feeling that we under pressure and stressors are the agents or stimuli in our environment that causes stress. Some of the stressors are noises, unpleasant people, heavy work load, lack of time or examinations.

In the early 1930s Hans Selye described stress as a bio psychosocial model that refers to the consequence of failure of an organism to respond adequately to mental, emotional or physical demands, whether actual or imagined [1]. Carveth JA found that university students experience high level of stress due to intensive academic workloads, the knowledge base required and the perception of having inadequate time to develop it [2]. It has been reported that they experienced high level of academic stress during studying for examinations with a large work load and with limited time period [3, 4]. Examinations are the most common student stressor. That stress can disrupt the internal and external environment of the student's body and cause physiological changes that tend to disturb homeostasis [5, 6].

Stress on a long run is dangerous and can contribute to illness through its physiological effects or maladaptive health behaviors. During the years of university life, students are exposed to different kinds of stress, especially during the difficult studying periods like examinations weeks. Many students are self- aware, that they become stressed under different circumstances and have some clues about their potential stressor.

Physiotherapy undergraduates are following lectures, practical and clinical training in their university life. They have shorter study leave period and longer study periods. They may tend to be stressed during their university life, especially in the examination period.

Therefore this current study was focused on to evaluate the stress level of physiotherapy undergraduates in examination period.

2. Materials and Methods

This was an analytical study which will be carried out to evaluate the stress level of the Physiotherapy students in Examination period at the Faculty of Allied Health Sciences, University of Peradeniya. Students from the levels of 1000 (fist year), 2000 (second year) and 3000 (third year) taken as the total sample (86) in year 2017. Level 4000 (fourth year) students were not included the study, because at the period of the survey they were in their clinical practice and it was not their examination period. A questionnaire was given

with 30 questions which were concentrated on the fatigue, atmosphere, handling day to day problems, sleeping patterns, studying patterns, preparation for the exams and the way that students faced for the examination.

The data will be collected at the last day of the examination period, i.e. after the examination is over. Participants answered the questions individually without any interruption. In the current study, all the data will be entered by using Microsoft Excel Sheet and analyzed by SPSS 22 statistical software.

3. Results and Discussion

There were 30 questions in the questionnaire and 4 point Likert scale (0 – 3) was used to calculate stress level of students (0= 20%, 1= 40%, 2=60%, 3= 80% stress level). Individual stress level was calculated separately.

Eg: Q 1. 0, Q2.1, Q3. 2,
(20+40+60)/3 = Avg stress value calculation
= 40

Some of the students did not answer all the questions, therefore for calculating the stress level, it was divided by the number of answered questions using SPSS 22 statistical software package.

Missing values are the questions that did not answer. When we indicated as a missing value it was automatically divided by the number of answered questions in SPSS statistical software.

All the statistical figures are generated according to the SPSS.

The total sample size was 87. In included 27 students from level 1000, 32 students from level 2000 and 27 students from level 3000.

General profile

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Stress	86	21.00	72.00	44.4332	11.77246
Valid N (list wise)	86				

Table 01. Mean stress value for total population

According to the calculation the mean stress value for the total sample was 44.43 and the standard deviation was 11.77. The minimum stress value was 21 and maximum was 72.
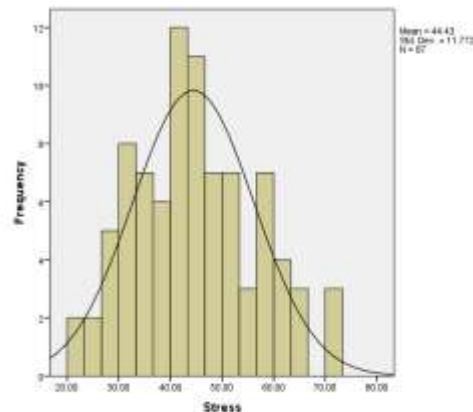

Figure 1: Stress Values of Total Sample

According to figure 1, the distribution of the mean stress value was in a normal bell shape, skew to left a bit. So this is a normal distribution.

Stress * Gender
Stress

Table 2: Stress value according to the gender

Gender	Mean	N	Std. Deviation
Male	46.4211	22	13.17039
Female	43.6629	64	11.35312
Total	44.3685	86	11.82593

Stress levels according to the gender were different in males and females. There were 22 males and 64 females in the study sample. The mean stress level of the males was 46.42 and standard deviation was 13.17. The mean stress level of females was 43.66 and the standard deviation was 11.35. According to table 02, in the total sample male students were more stressed than female students.
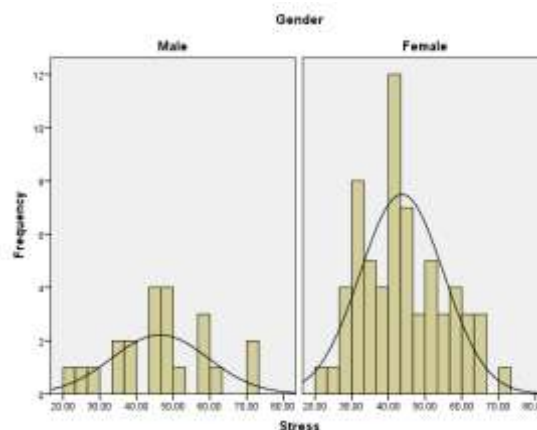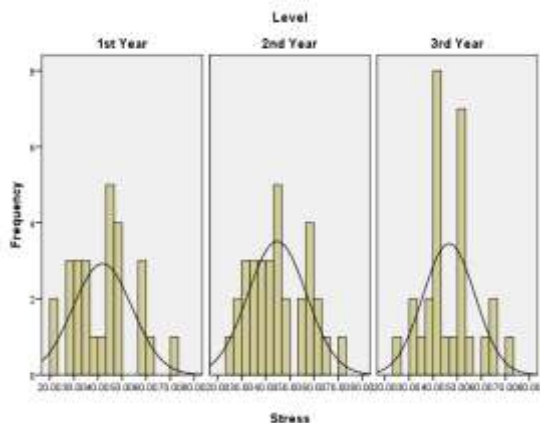

Figure 2: Stress values according to the gender

Stress values according to the academic year

Table 3: Stress value according to the academic year/ level

Stress			
Level	Mean	N	Std. Deviation
1000	41.8227	27	12.26664
2000	44.7750	32	12.11863
3000	46.5598	27	10.78327
Total	44.4332	86	11.77246

According to the table 03, mean stress value of the level 3000 was higher compared to level 1000 and 2000. From level 1000 to level 3000, there was a gradual increase in stress levels among students. This may be due to gradual increase in their study work load, including more advanced lectures and practical.

Figure 3: Stress values according to the academic year/ level

Table 4: Stress value according to the academic year/ level

				Stress values				
				Count	Mean	Mini-mum	Max-imum	Standard Deviation
Level	1000	Gender	Male	9	46.78	21.00	70.00	15.03
			Female	18	39.35	23.00	60.00	10.21
	2000	Gender	Male	8	43.03	35.00	58.00	7.97
			Female	24	45.36	24.00	72.00	13.31
	3000	Gender	Male	5	51.20	26.00	70.00	17.20
			Female	22	45.35	30.00	66.00	9.27

Table 04 shows the stress values according to different academic levels and according to the gender difference in each study year. In level 1000, mean stress value for males was 46.78 with a standard deviation of 15.03 and for females was 39.35 with a standard deviation of 10.21. In level 2000, mean stress value for males was 43.03 and for females was 45.36. In level 3000, mean stress value for males was 51.20 and for females was 45.35.

4. Conclusion

Mean stress values of the total sample was 44.43 according to the statistical analysis by SPSS software. Males were more stressed compared to females in total sample. According to the different study levels, in level 1000, mean stress value was 41.82, level 2000 – 44.77 and level 3000 – 46.55. Stress values are increased according as the students were upgrading from level 1000 to 3000. According to the gender and study level, in level 1000 and 2000 males are more stressed compared to females but in level 2000 females are more stresses compared to males.

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Author Profile

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