

CROSS SECTIONAL SURVEY OF STRESS AMONG DOCTOR OF PHYSICAL THERAPY (DPT) TEACHERS IN LAHORE

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ABSTRACT

Objective: To determine the level of stress among the academic side in Doctor of Physical Therapy teachers and also to identify the age and gender specific patterns of stress in the target population.

Material and Methods: Data was collected from different Physical Therapy institutes of Lahore, Pakistan. The study period was from February 2016 to August 2016. The results were calculated from 61 participants as per response rate of teachers. The study time period was seven months. The age range was 22 to 50 years including 20 male and 41 female teachers. Stress questionnaire of NUT (National Union of Teachers) was used for this study with demographic data. The qualitative variables were demonstrated through frequency tables and graphs where needed.

Results: The results showed that out of 61 respondents who were willing to participate in this study 78.7% (n=48) had moderate level of stress at their job, while 21.3% (n=13) had low level of stress at their university/college.

Conclusion: A large number of Doctor of Physical Therapy teachers have moderate level of stress. With the increasing age the stress related to teaching increased and there was no strong correlation between the gender and stress.

Keywords: Physical, therapy, stress, teachers.

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INTRODUCTION

Stress at job ensuing from increased complications of drudgery and its different demands are becoming a noticeable feature of recent establishments. Stress at work place has touched almost all the professions in the world.¹ Stress is a state of affair which involves demands of physical and mental energy which in turn influences and changes normal physiological and psychological well-being of an individual. There are numerous situations in the work life like, over burden, low pay, leg pulling plus poor boss and members' relationships, all these factors ultimately increase stress of an individual.² If the stressors are ranked the behavior of students is on the top of list of stressful factors.³

Teaching profession was being considered as low stress occupation but during last few decades, it has

become a stressful job. Teaching is becoming more and more challenging field. According to a study conducted on German teachers, 22% were found to be tensed and maximum section fell into great stress class.⁴ Worldwide 70% teachers are under recurrent stress, including student's manners problem being most common. Teachers' job satisfaction level depends on number of factors and stress is one of the greatest factor which influences this level.⁵

Occupational stress can be defined as, experiencing unpleasant negative emotions like, tension, anxiety, frustration depression and anger resulting from aspects of work. Some major causes of stress are intrinsic factors of job, relationships at work place, career development, organizational climate and role in the organizational climate.⁶

Strain disturbs the entities physiologically, fervently and mentally. Occupational stress is a specific element in the current era that is on upsurge. In the present world the stress related to workplace ensues serious health concerns.⁷ Generally, it is the ineffective management of job burdens due to the incapability to fit the surroundings or situations. A study stated that mental and body conditions effects one's output and also the well being to do excellent work.⁸

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A study undertaken in universities in UK, it was found that university staff was highly stressed particularly by work related relationships, lack of control and resources, communication and work overload. Occupational stress level in 955 university teachers from 9 state universities of South India was measured. It was revealed that 74% of the lecturers were suffering from moderate to high level of stress.⁶ One more study regards teacher proficiency as having the information and expertise necessary for the teaching profession, to complete the learning needs of pupils, developing a high-level obligation to the teaching profession, possessing an adequate level of self-sufficiency in the decision-making procedure.⁹

One literature studied the professional stress among teachers of Kerala, teaching the higher secondary school level. The results suggested that 48% of the faculty of one of the districts had low stress levels, where as in another state stress was 80%.¹⁰ Another survey investigated the effect of professional stress on the psychological health of the school teachers. Female teachers have more nerve-racking positions when compared with male colleagues.¹¹ A survey was conducted on Professional Teachers' by Union of Hong Kong on teacher's strain and stress. 1,100 questionnaires were sent by this union to its members through random sampling method and got a return rate of 45% respondents. Results were calculated and was concluded that 61% of the teaching staff was under stress and they found their job hectic mentally challenging.¹²

Most of the researches targeting the stress accountability in work related environments have been conducted in developed countries, the developing countries have not yet contributed in this regard. And also in the recent time, there is increased frequency of people picking teaching as a profession, which suggests an immense need of study to investigate the stress occurrence in the target population. The current study determined the level of stress among the academic side in Doctor of Physical Therapy teachers in institutions of Lahore and also identified the age and gender specific patterns of stress in the target population.

MATERIAL AND METHODS

A cross sectional survey was conducted in Lahore. Data was collected from different Physical Therapy institutes of Lahore, Pakistan. The samples were collected from February 2016 to August 2016. Inferential study was performed for this cross sectional survey in faculty teaching DPT students among educational institutes in Lahore. Non probability convenience sampling was done with the volunteer participation of teachers and the sample size was calculated according to the Single proportional formula.¹³ $n = Z_1 - \alpha/2^2 P(1-P) / d^2$ where confidence level was kept 95%, anticipated population proportion being 0.20, absolute precision required and margin of error was kept

5%, sample size was calculated to be 184.

Due to sensitive information involved and in security of University prestige to be tempered, there was less response rate. That is why the results were calculated for 61 participants as per response rate of teachers. The study time period was seven months. The age range was 22 to 50 years including 20 male and 41 female teachers. The data was included of the HEC recognized institutions and the teachers who were appointed on temporary basis or as visiting faculty were excluded from the study. Informed consent was taken in written form to participate in the study. Stress questionnaire of NUT¹⁴ (National Union of Teachers) was used for this study with demographic data added in it. The tool consists of 100 scores, the higher the score the greater is the level of well-being of individuals. 51 to 100 scoring depicts moderate evidence of stress, upto 50 scoring depicts high level of stress. The quantitative variables of the data were described through mean and standard deviations whereas the qualitative variables were demonstrated through frequency tables where needed.

RESULTS

Out of 61 respondents that were interviewed for the level of stress at their job place, 78.7% (n=48) had moderate level of stress at their job, while 21.3% (n=13) had low level of stress at their university/college. Hence, larger number of teachers has moderate level of stress as shown in table 1.

The mean age of the respondents calculated was 26.86 ± 3.28 . Mean score of results of stress came out to be 90.64 ± 13.51 . From the total of 61 participants that were interviewed for the level of stress at their job place, 36.1% (n=22) felt mostly that their job is satisfying, while 36.1% (n=22) felt sometimes satisfied and fulfilled with their job. Only 18% (n=11) were not much satisfied with their job at university/college.

Through cross tables of respondents' age and stress scores; it was found that the value was -0.56 which means it is negatively correlated. Hence, increase in age factor has a decreasing effect in stress scoring. But as this value is not less than 0.05 so it is not highly significant (table 3). Through cross tables of respondents' gender and stress scores result; it was evaluated that for males value is -0.230 and for females 0.213 as per pearson correlation which means that male gender is negatively correlated with stress score while female is positively correlated (table 2). Since both values are greater than 0.05 so these are not significant values and there is not much relation between gender of respondents and stress scoring.

Out of 61 respondents that were interviewed for the level of stress at their job place, 78.7% (n=48) had moderate level of stress at their job, while 21.3% (n=13) had low level of stress at their university/college For males value is

Table: 1 Level of stress among Physical Therapy teachers

Level of Job Stress	Frequency	Percentage
Moderate Evidence of Stress	48	%78.7
Low Evidence of Stress	13	%21.3
Total	61	%100

Table: 2 Gender of Respondents * Score.Category Crosstabulation

		Score.Category			
			Moderate Evidence of Stress	Low Evidence of Stress	Total
Gender of Respondents	Male	Count	16	4	20
		% of Total	%26.2	%6.6	%32.8
	Female	Count	32	9	41
		% of Total	%52.5	%14.8	%67.2
Total	Count	48	13	61	
	% of Total	%78.7	%21.3	%100.0	

Table: 3 Correlations of age and gender of the respondents

Gender of Respondents			Age of Respondents	Score.Category
Male	Age of Respondents	Pearson Correlation	1	-.230
		Sig. (-2tailed)		.328
	Score.Category	Pearson Correlation	-.230	1
		Sig. (-2tailed)	.328	
Female	Age of Respondents	Pearson Correlation	1	.213
		Sig. (-2tailed)		.182
	Score.Category	Pearson Correlation	.213	1
		Sig. (-2tailed)	.182	

-0.230 and for females 0.213 as per pearson correlation which means that make gender is negatively correlated with stress score while female is positively correlated.

Since both values are greater than 0.05 so these are not significant values and there is not much relation between gender of respondents and stress scoring.

DISCUSSION

The current study targeted the investigation of stress levels and the gender and age specific factors among teachers of Physical Therapy Institutes in Lahore. The results of the study showed that there are moderate levels of stress among the teachers of Physical Therapy institutes.

One of the study examined the occupational stress of secondary school teachers and evaluated the differences between the occupational stress related to gender, year of experience in the states of India. There were significant differences in the male and female teachers with minimum experience and that of having greater than five years' experience. It was concluded that males undergo more

stress than female teachers. It was also further explained that teachers with greater experience had lower level of stress related to job than the teachers with less experiences. The results did not explain the level of stress among the private or government school teachers.¹⁵

Another study concluded that female teachers had more nerve-racking positions when compared with male colleagues. The study considered that the male community perceives the sources of strain less as compared to the females. The study also explained the relationship between the gender and the mental health.⁸ The current study adds in the evidence with the results showing greater stress related to job in females as compared to the male teachers with a minor difference. As the scoring is greater than 0.05 so these are not significant values and there is not much relation explained between gender of respondents and stress scoring.

The results of the current study showed high level of stress among the older age population, and these findings are not correlated to results of the studies which had concluded that young age teaching staff are more under

the stress as they do not have much experience^{16,17} However, another study had the similar results as the current study, showing that old age teachers have greater amount of stress.¹⁸ The older age teachers adjust very often in the changing environment with new responsibilities of current era. As experience increases with the age concurrently the population of this age expect high pay scale according to their experiences. And also the physical demanding environment acts as a burden to this age group as compared to the active young teachers. These specific stress sources should be considered for the future research topics and also this age population groups should be engaged in stress management programs for better outcomes.

A study reported that job related stress is strongly related with the working environment and the specific individualized characteristics of the employee, and this is an obvious thing when the demands of the job surpasses the employee's capabilities.¹⁹ The results of this study are in line with our findings. Some other studies^{20,21} are also in the favor of the results of the current study, reporting that mental, physical and the awareness of teachers to the environment has a positive impact on the job productivity. A study conducted in the Khorasan public schools explained that job related stress is higher in the teaching staff.²² Similar result outcomes also apply to the present study.

Earlier literature finding reported that institutes with an open organizational environment the employees and the teaching staff remain contented, satisfied and confident. Whereas the teachers who are working in the closed environment complains more and have higher rate of stress. These findings are in favor of our study results.²³ Another study indicated that closed working environment causes low mentality, low level of efficiency and stability and also disinterest in work, high burden of productivity and the all factors in the end contributing to the stressful environment. The chronicity of this stressful environment results in depression, anxiety related issues and work fatigue.²⁴

In the view of above mentioned findings, it is essential to target the stress related factors in a teaching job environment. The teachers working in open climates are more confident and efficient in their tasks, and further the organization get positive results in management and surveillance. Finally, the top identified stressors described by the teachers were insufficient wages, highly physical demanding environment and disobedient students. The results of the study suggested to have policies related to stress coping strategies in Lahore Physical Therapy institutes, that can in return improve the quality of life of the teachers.

CONCLUSION

There is moderate level of stress among the study population. The levels of stress experienced by physical therapy teachers was explainable through age and gender of the participants. With the increasing age the stress related to teaching increased and there was not strong correlation between the gender and stress. Moreover, complex correlations have been explained between various stressors and characteristics of population.

RECOMMENDATIONS

The study findings have future implications to make public policies targeting the stress reduction methods and improving quality of life among the teachers of physical therapy in Lahore.

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AUTHOR'S CONTRIBUTION

Following authors have made substantial contributions to the manuscript as under

Munir M: Conception and design ,Collection and article of data and final approval.

Khan I: Drafting of the final approval and guarantor of the article.

Chaudary M: analysis and Interpretation of data.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.