

Impact of Occupational Stress on Physiological Health of Female Teachers of the Quetta City, Pakistan

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Abstract

This study was designed to investigate the impact of occupational stress on the physiological health of the female teachers, among the total number (n=330) of teachers, (n=110) were primary level, (n=110) were secondary level and (n=110) higher level were randomly drawn from the different educational organization in private and government sector of the Quetta city. The dimensions such as BMI, blood pressure, blood glucose level or any other disease were measured beside their demographical factors. Questionnaire was designed and approved by the ethical committee of university of Balochistan. The random sampling method was applied during the study, information was gathered and analyzed using SPSS and the strength of relationship between quantitative measures was assessed using the Chi-square test. The outcome uncovered that dominant part of female

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teachers were affected by occupational stress, which had negative impacts on their physiological health and ultimately hinders their work efficiency. In the event that the inclining factors for stress are left unattended to, resultant outcomes can effectively affect instructors' efficiency. In this paper, endeavors have been made to recognize the fundamental driver of occupational stress among the female. Each component of stress contributed fundamentally to the general dimension of stress experienced by the female teachers. Intercessions, for example, stress the board, can be done to decrease stress in the educational organizations. Discussion highlights the potentials for future research.

Keywords: Occupational Stress, Health of Female Teachers

INTRODUCTION

Teaching is a noble profession but now it's a stressful profession. Early studies suggested that the main reason of this stress was over burden or over work of the teachers, with the passage of time, many more studies and researches came into lime light on occupational stress. If a teacher has constant stress and is feeling helpless and completely exhausted certainly she is on the road to occupational stress, which will ultimately affect their physical health.

Occupational stress among the teachers can prompt students' negative responses and states of mind toward the instructor. Furthermore, the negative responses are associated with decreased quality in educating, less adaptability to acknowledge different students' needs, which may lead to lack of collaboration between student and teacher. Absence of enthusiasm for teaching, imparting, and passing on the lesson of the day may caution indications of worn out educators.

Low accomplishments of the understudies' high educator non-appearance, turnover, profession change, psychological wellness, breaking down execution and early retirement, low confidence and depressive manifestations disdain, outrage and defenselessness migraine, regular colds, influenza, and cardiovascular manifestations such as coronary heart disease, hypertension and so forth are among

the negative results of the incessantly worn out instructors. The outcome would additionally prompt the decay in social and family relations.

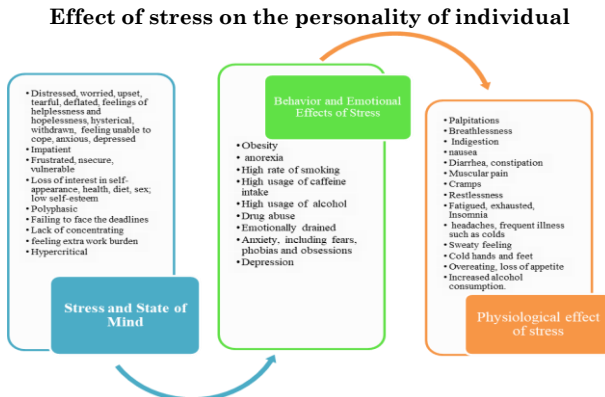
Occupational stress can be conceptualized as three unmistakable measurements. It is viewed as the pressure component. It alludes to feeling of being candidly overextended and weariness of one's enthusiastic assets, exhaustion, weakening, absence of vitality and destroying are the properties of this part). Depersonalization this is the other assessment component. It is depicted as cynicism, fractiousness, loss of vision, unseemly states of mind towards the beneficiary. It alludes to antagonistic, unfeeling, or unreasonably isolates reaction to other individuals. Decreased individual achievement is self-assessment part and is linked with diminished proficient productivity, efficiency or ability, low assurance and powerlessness to manage work or job description. So, it speaks to ruin in one's sentiments of accomplishment and wellness at work (Leithwood et al 2004; Chang 2009; Voss et al 2010).

The result of occupational stress at the association level is obliterating and reducing hierarchical responsibility among the well trained and prepared human asset in that activity. Comparing the population at risk in the private and public sector schools reveals that there is great diversity in the origin of stress experienced by a public and private school teachers which are leading to occupational stress in the teachers of each of the respective sectors (Hock 1988; Henry et al 2013).

Occupational stress among teachers did not obtain that much attention in last few decades comparatively now the situation is much different as many researchers and scholars are having great concern towards this problem as the occupational stress is leading towards the increasing health issues in teaching professionals which take the teaching profession at uncertainty of flourishing among different professionals teachers are more exposed to large quantity of stress i.e, high level of physiological and psychosocial stressors (Stoeber et al 2008).

In white-collar workers, there have been several large prospective studies. In a four year finish study (N=15530), records linkage was used to access psychiatric morbidity data (suicides, hospitalization, prescription of psychotropic drugs). Interpersonal

conflict at work predicted “physician-diagnosed” psychiatric morbidity (relative risk=2.18) even after controlling social class, prior health and prior “mental instability/stress (Tennant 2001).



Generally it is observed in many parts of the world females are majority in teaching profession, hence the need for a research was obligatory. The reasonable structure of the present investigation was set to locate the imaginable indicators of female teachers’ occupational stress regarding some statistic factors, which may be useful in controlling or decreasing the impacts of the observable facts. Normally almost all the professions are suffering from different levels of stress and each profession has its own level of challenges which are faced by individual that will directly or indirectly reasons to create stress which ultimately affect them mentally or physically, that might be a hurdle in their professional life and health issues.

In spite of a considerable number of studies in the area of occupational stress among the teachers, the dilemma still persists, that is somehow ignored by the researcher of Quetta, Balochistan which causing major impact on the physiological health of the teachers and which is now believed a social problem and the need for solving it as a practical intangible framework for the research in the area of occupational stress. In this regard the analysis of biochemical changes and hematological study was carried out among the female teachers keeping in mind occupational stress.

RESEARCH METHODOLOGY

Study Design:

A cross sectional study configuration was utilized to perform the study. It was organized in two phases, in first phase the public organizations of the city were selected, while in the second phase private organizations of the Quetta city were selected randomly.

Study Area:

Quetta is the one of the most mainstream and socially liberal urban city of Pakistan. Where people belong to different backgrounds with the variety of cultures and are multilingual. With a populace evaluated, recently to be around 2.51 million. Taking into account the educational and instructive needs of such an exceptionally populated district of the province are the different government and private sector organizations.

Ethical Approval:

The ethical approval was affirmed by the Ethical board, Institute of Biochemistry, University of Balochistan, Quetta. A written consent form was issued by the department which was submitted to the head of every educational organization to allow this survey in their respective organization. The participants were assured, before conducting the research work all the activity was fully explained and a written consent was also taken from the teachers. The administration of the origination was also taken in confidence for the requirement of our research.

Sampling:

The data was compiled from almost 330 female teachers of the district Quetta with a mean age of ± 40.1 years and a mean work experience of ± 14.73 years. The assessment of occupational stress was gender based as the study was conducted only among female staff of schools, colleges and universities. Among the total (n=330) respondents, (n=110) respondents were from primary level, (n=110) respondents were from secondary level, while (n=110) respondents were from the higher level.

Participants Criteria:

Female teachers with the age range of 20-60 years from the different government and private schools, colleges and universities of the district Quetta were part of this study. In this study only the female

staff was included while the male staff members, non-teaching administrative staff and the female teachers, suffering from any chronic incapacitating sickness were excluded.

Data Collection:

The administration of all the schools, colleges and universities were advised about this study practice in order to procure endorsement and clear any regulatory reservations. An official endorsement was acquired from the educational organization. The questionnaire was circulated hand to hand and clarified in detail with finish directions and the questionnaire was translated in Urdu for ease of the respondents.

Questionnaire:

For the collection of information, the survey technique was utilized, in which an instrument, a properly organized questionnaire was created, including the maximum plausible stress factors, under the heading of review of literature, recent Pakistani educational system and with the guidance of research supervisor. A survey questionnaire was structured for research, in which the initial part was planned to get important data about participant's age, work experience, instructive level, conjugal status, organizational status/sector. Each demographical character was evaluated and their percentage and frequencies were also represented in tables.

In the second part of the questionnaire health related characteristics the participants were mentioned such as respondents' BMI, Blood sugar level (mg/dl), blood pressure, diabetes and any other disease.

The last part of the questionnaire comprised of 22 questions which are further classified into three sections which are (dissociation disorder) depersonalization (DP), (personal achievements) Personal Accomplishment (PA) and (emotional collapse) emotional exhaustion (EE).

Data Analysis:

Data from the questionnaire was converted into numeric code by the analyst of the research. Quantitative information will be evaluated through Chi-square test using SPSS, a statistical program in which different statistical methods were utilized to evaluate the data.

RESULTS AND DISCUSSION

A total of 600 questionnaires were distributed among the female teachers of Quetta city and 330 questionnaires were collected for analysis (110 from primary, 110 from secondary and 110 from higher level).

Stress can impact a person in many ways eating pattern in people. Stress seems to change the overall eating in two different ways, bringing about under or extra eating habit, which might be affected by stressor seriousness and it will affect the supplement thick sustenance's, in particular those that are high in sugar and fat which might be connected to weight gain, obesity. The follow-up measurement of body height and weight were conducted. The subsequent estimation of body stature and weight were directed. Abnormal state of unending stress could prompt increase in body mass index (BMI) in overweight which is the major cause of obesity or under-weight condition of the teachers, reported by Torres 2007. While in the present study among the 330 female teachers' 147 respondents were having normal BMI and 51 respondents were obese, 98 were respondents were overweight and 34 respondents were underweight as shown in the tables 2, which shows similarity in the results.

Stress can affect the blood pressure by causing hypertension or hypotension through continuous pulse rises just as by incitement of the sensory system to create a lot of vasoconstriction hormones that elevate the BP. different Variables influencing pressure incorporate hypertension, work stress, race, social condition, emotional stress. Moreover, when one hazard factor is combined with different pressure creating factors, the impact on blood pressure will be duplicated. Hypertension might not be caused directly by stress but continuous exposure to stress can increase the blood pressure that will untimely lead to the hypertension as reported by Dzietham et al 2004. In this present study 180 respondents were having normal BP, 133 respondents had low BP while 17 respondents were having high blood pressure, which is not showing agreement with the results of Dzietham (2004). Aside from depending on assistance from someone else teachers ought to know to figure out how to deal with stress and

resolve the issues they are facing to overcome the occupational stress (Kyriacou 2001).

Occupational stress may straightforwardly the reason of cardiovascular problems by actuating rise in the blood pressure and changes in pulse rate that have negative results on working of the cardiovascular framework and the threat of diabetes due to the unhealthy propensities, which will be the major reason of cardiovascular issues; and females in extreme interest and low-control occupations report an expanded dimension of stress at work, and hence might be at a more serious danger of negative wellbeing outcomes. These finding are consistent with that of Krajnak (2014).

Occupational stress was measured among the female teachers without any grouping of subjects and this result is contrary to the Barabanshchikova, (2014) who reported two groups of teachers were identified which were the comprehensive school teachers (CSG) and the Gymnasium group (GG) of teachers.

Demographic Characteristics of Respondents:

Demographic characteristics of the respondents were described in table 01. Majority of the participants belongs to the age group 20-30 years (n=177, 53.6%) and majority with the work experience (n=210, 63.6%) of less than 7 years. A total of 600 questionnaires were distributed and 330 questionnaires were collected back from different levels for analysis (n=110 primary, n=110 secondary and n=110 higher level, with 33.3% respectively). Maximum number of respondents were married (n=223, 67.6%). The education of the majority respondents are masters (n=221, 67.0%), while there is no such difference in the number of respondents from private and government sector (private n=171, 51.8%, government n=159, 48.2%), showed in table 1.

Table 1 Demographic Characteristics of Respondents (n=330)

DEMOGRAPHICS	FREQUENCY N=330	PERCENTAGE %
Age group (Yrs)		
20-30	177	53.6
31_40	92	27.9
41-50	42	12.7
51-Above	19	5.8
Work experience (Yrs)		
1-7	210	63.6
8-14	58	17.6
15-21	27	8.2

22-Above	35	10.6
Level		
Higher	110	33.3
Primary	110	33.3
Secondary	110	33.3
Marital Status		
Married	223	67.6
Separated	12	3.6
Unmarried	87	26.4
Widow	08	2.4
Education		
Graduation	48	14.5
Masters	221	67.0
Matric	18	5.5
Mphil	41	12.4
PhD	02	0.6
Sector		
Govt	159	48.2
Private	171	51.8

Health Related Characteristics

Health related characteristics were described in table 2. Body Mass Index (BMI), which was calculated according to the standard scale and majority of the respondents are normal weight (n=147, 44.5%), over weight are (n=98, 29.7%) and obese are (n=51, 15.5%). The previous diabetic history of respondents among the total (n=330) respondents (n=22, 6.6) are diabetic and the reported current glucose level is high among the (n=63, 19%) respondent. The only (n=180, 54.5) respondents are having the normal blood pressure. Most of the respondents are having other diseases as well such as hypertension (n=19, 5.8%), migraine (n=25, 7.5%), hormonal disorder (n=13, 3.9%), PCOS (n=6, 1.8%) and gastro-intestinal (n=6, 1.8%), showed in table 2.

Table 2 Health Related Characteristics

CHARACTERISRICS	FREQUENCY N=330	PERCENTAGE %
BMI		
Normal weight	147	44.5
Obesity	51	15.5
Over weight	98	29.7
Under weight	34	10.3
Diabetes (previous history)	22	6.6
Blood Pressure Normal	180	54.5
High Glucose Level	63	19
Other Diseases		
Hypertension	19	5.8
Migraine	25	7.5
Hormonal Disorder	13	3.9
PCOS	6	1.8
Gastro-intestinal	6	1.8

Overall Impact of Occupational Stress on the Female Teachers

Overall impact of occupational stress on the female teachers was analyzed in terms of three major categories, which are personal accomplishment (PA), emotional exhaustion (EE) and depersonalization (DP) with low, moderate and high level of occupational stress. Among the total 330 respondents majority were at risk of high level of PA, (n=176, 53.3%), respondents were having high DP (n=323, 97.9%), and majority were having high EE (n=300, 90.9%) which is the main reason for many physiological problems, showed in table 3. This study shows corroborate to the previous research by Seth et al 2016.

Table 3 Occupational Stress

CHARACTERISRICS	FREQUENCY N=330	PERCENTAGE %
Sum of Personal Accomplishment(PA)		
Low	105	31.8
Moderate	49	14.8
High	176	53.3
Sum of Emotional Exhaustion (EE)		
Low	1	0.3
Moderate	29	8.8
High	300	90.9
Sum of Depersonalization (DP)		
Low	0	0
Moderate	7	2.1
High	323	97.9

Demographic characteristics and Occupational Stress

Table 4 highlights the relationship between demographic characteristics and occupational stress. The study reveals that none of the demographic characteristic influences the occupational stress of the participants.

Table 4 Demographic characteristics and Occupational Stress

Demographic Characteristics	Sum of Emotional Exhaustion (EE-High)	EE p-value	Sum of Personal Accomplishment (PA-High)	PA p-value	Sum of Depersonalization (DP-High)	DP p-value
Age Group (Yrs)						
20-30	157		84		173	
31-40	87		53		90	
41-50	40	0.226	24	0.22	41	0.931
50-Above	16		15		19	
Work Experience(Yrs)						
1-7	189		102		205	
8-14	55	0.694	35	0.055	57	0.754
15-21	26		17		26	
22-Above	30		22		35	

Health and Occupational stress

The table-5 describes the relationship between the occupational stress and health of the respondents. The high blood pressure and high glucose level has significantly ($P < 0.05$) associated with occupational stress, by applying the Chi-Square test by using the SPSS software. In health related characteristics in current high blood pressure the Sum of EE-high is (n=54) with the P-value 0.247, sum of PA-high is (n=36) with the P-value of 0.060 and Sum of DP-high is (n=59) with P-value of 0.289, which shows a huge difference with the previous history of high blood pressure among the respondents in which Sum of EE-high is (n=17) with the P-value of 0.009, Sum of PA-high is (n=15) with the P-value of 0.064 and Sum of DP-high is (n=19) with the P-value of 0.042. On the other hand in previous diabetic history of the respondents Sum of EE-high is (n=10) with the P-value of 0.679, Sum of PA-high is (n=8) with the p-value of 0.118 and Sum of DP-high is (n=10) with the p-value of 0.503 while in current high glucose history Sum of EE-high is (n=60) with the p-value of 0.002, Sum of PA-high is (n=32) with the P-value of 0.032 and Sum of DP-high is (n=62) with the p-value of 0.435. The other diseases are also discussed in the table below.

Table 5 Health and Occupational stress

Health related Characteristics	Sum of Emotional Exhaustion (EE-High)	EE p-value	Sum of Personal Accomplishment (PA-High)	PA p-value	Sum of Depersonalization (DP-High)	DP p-value
BMI						
Normal weight	133		73		143	
Obesity	47	0.793	28	0.877	51	0.688
Over weight	91		57		96	
Under weight	29		18		33	
High Blood Pressure	17	0.009	15	0.064	19	0.042
Current Blood Pressure High	54	0.247	36	0.060	59	0.289
Diabetes History	10	0.679	8	0.118	10	0.503
Current Glucose Level	60	0.002	32	0.032	62	0.435
Other Diseases						
Hypertension	14		7		19	
Migraine	14		7		14	
Hormonal Disorder	12	0.876	9	0.282	13	0.869
PCOS	6		6		5	
Gastro-intestinal	6		2		6	

CONCLUSION AND RECOMMENDATION

Occupational stress has turned into a zone of enthusiasm among professionals and researchers in many areas over the globe. Teachers experienced numerous sorts of issues during teaching which is the main reason for feeling of anxiety and occupational stress, which will have impact on the physiological health.

Individuals of our general public are getting purpose towards not giving a specific dimension of regard what an educator merits. On the off chance that an inquiry is posed to overall population, "who need to be an educator" positive answer would once in a while be found. Along these lines, more regard ought to be given to calling of educating and too much topic to teach" is likewise one of upsetting things.

In spite of the fact that this investigation has demonstrated that feelings of anxiety, stress in educational institutions of Quetta city are high, which needs attention in making solid speculations. It is hence proposed that extra research, maybe fusing physiological strategies to get estimations of feelings of anxiety, should be directed so the educators' occupational stress can be comprehended in proper and most appropriate manner.

A very enhanced state of occupational stress is experienced by the female teachers is the main cause for highly expanding dangers of medical issues, that will be the reason for decreased efficiency and effect fundamentally not only on the instructors itself but as whole overall on their students and the institutions. There are additionally such kinds of expert decay as instructive lack of concern, generalizations, dictatorship and obstinacy.

Nonetheless, occupational stress is a major issue nowadays for that the executive's projects ought to be started in schools, colleges and universities to help out the teachers deal with their stress and minimize its physiological impact that will directly have its effect on students and institution betterment.

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