

Faculty Stress at Higher Education: A Study on the Business Schools of Pakistan

Aqsa Akbar, Waheed Akhter

Abstract—Job stress is one of the most important concepts for the today's corporate as well as institutional world. The current study is conducted to identify the causes of faculty stress at Higher Education in Pakistan. For the purpose, Public & Private Business Schools of Punjab is selected as representative of Pakistan. A sample of 300 faculty members (214 males, 86 females) responded to the survey. Regression analysis shows that the Workload, Student Related issues and Role Conflicts are the major sources contributing significantly towards producing stress. The study also revealed that Private sector faculty members experienced more stress as compared to faculty in Public sector Business Schools. Moreover, females, younger ages, lower designation & low qualification faculty members experience more stress as compared to males, older ages, higher designation and high qualification. The study yield many significant results for the policy makers of Business Institutions.

Keywords—Faculty Stress, Higher Education, Stress Coping Strategies, Work Load

I. INTRODUCTION

FACULTY members from around the globe are experiencing high level of stress [1,2,3]. The Proliferation of stories and works regarding occupational stress has greatly gained the attention of the researchers. Immense amount of work regarding occupational stress is done in corporate world issues concerning to low productivity, job satisfaction, high absenteeism, hi- turnover rate and physical & psychological disorders, yet, very less studies were conducted regarding stress in academe. The reason of less studies of faculty stress lies in perception that teaching is generally a low stress job as compared to corporate world. But Research conducted by Jhonson, cooper, Cartwright & donald taylor [4] in USA resulted teaching as one of the most stressful occupation out of 26 other occupation. The current work attempts to study the phenomena of stress in academe in Business schools of Pakistan.

II. LITERATURE REVIEW

Job stress at higher education is now becoming a crucial issue for the faculty members and administrators alike [5,6]. Research conducted in many countries reported growing academic stress as a major concern for the policy makers. These researches include:

Aqsa Akbar is associated with Lahore Business School, The University of Lahore, (Phone:0092-331-4379289; email: aqsa_akbar@yahoo.com).

Waheed Akhter is a PhD and working as Associate Professor with Department of Management Science, COMSATS Institute of Information Technology, Lahore (e-mail: drwaheed@ciitlahore.edu.pk).

Gmelch, Wilke and Loverich [7], Daniels and Guppy [8], Boyd and wylie [9], Blix, Cruise and Mitchell [10], Bradly and eachus [11] etc.

In 2000, Wiley [12] reported that the consequences of stress can take the form of behavioral characteristics like Disturbing the interpersonal relationships or decrease in the work performance. He also found that some amount of stress experienced by the teachers is due to school's culture and climate.

McGrath [13] defined stress from a psychological point of view which is an interaction between the individual resources and environmental demands. In 2001, Kyricou [3] defined teacher stress as a teacher's experience in relation to the negative and unpleasant emotions .The stressful conditions results in decrease in communication, motivation, performance etc.

The unpleasant environmental demands or stimuli that cause stress are referred to as stressors. Lazarus [14] defined stressors as the experiences and conditions of daily living that are appraised as salient and harmful or are threats to a person's well being. Eckert and William [15] reported that routine duties, long hours, poor facilities, friction in intra-faculty relations and administrative red tape were the most important sources of stress. Another study identified personal capacity of faculty members, inadequate organizational resources and serious time constraints as a major sources of stress in academe [16]. One research found teaching as stressful and the major sources of stress comes from work related issues [2]. Workload is considered as the most important source of stress in education sector [17]. Many other researches conducted on the sources of stress in teaching professions also found that workload contributes a significant part in producing stress [18,19]. Work load includes sheer number of hours on the job, administrative work [20], being frequently called by the institutional works, also found statistically significant correlation between workload in form of hours of work and its ill effects on physical health [21]. The second stress generating factor is Role conflicts. Role conflict can be defined as “ reflects incompatible demands on the person (either within a single role or between multiple roles occupied by the individuals, it can induce negative emotional reactions due to the perceived inability to be effective on the job”[22].

Disruptive behavior by students was also found to be one of the important stressors for faculty [23,3]. Student related issues involve faculty conflicts with students over evaluation, advising and teaching. Organizational structural & procedural characteristics are supported by many researches as a

considerable source of stress [24,25]. Organizational structural and procedural characteristics involve decision making process, management styles, performance appraisal, support for research, rules & regulation etc. Abouserie [26] found poor relationship with colleagues as one of the important factors producing stress.

III. OBJECTIVES OF THE STUDY

The objectives of the study are three folded, first; to identify the sources of faculty stress in Business schools of Pakistan. Second, To identify whether the faculty stress varies with respect to background variables such as gender, age, salaries and qualification etc. Third, to identify the leading stress coping strategies, faculty members of the Business schools of Punjab adopt to reduce or eliminate stress.

IV. RESEARCH METHODOLOGY

Selection of variables causing stress is developed from the literature review and informal interviews conducted by the researcher with some of the faculty members of Business Schools. Firstly, heavy literature review is being studied to get the preliminary concept about the phenomena. Most of the items in the instrument is adopted by the Gmelch's famous index [21] constructed particularly for the faculty members, Faculty stress Index (FSI). Initially, a series of around 30 informal interviews were conducted by the researcher with the faculty members of the Business Schools of Punjab to get the information about the stressors, they experiencing during their tenure. Faculty members were asked to reply to identify the stressors, they encounter during their working hours. The informal interviews with the faculty members played a significant role to structure the questionnaire. The first draft of the questionnaire was again made check by some of the senior faculty members to get valuable suggestions. After little modifications advised by those members, the final draft of the questionnaire was constructed and as a pretesting (Pilot-testing), made it fill by 30 faculty members to ensure the reliability of each independent variable entered and to consider the instrument worthy for detailed investigation. Every item in the instrument is logically linked with the objectives of the study, backed by the literature review and the responses from the interviews of faculty members, which ensures its validity (measuring what it is designed to measure). The instrument consists of three parts. First part consists of questions related to demographic variables such as age, salary, designation, gender etc. Second part involves questions related to measurement of various stressors identified as potential source of stress. The variables identified as causing stress are 1. Workload(WL); 2. Poor Peer relationships(PPR); 3. Student related issues(SRI); 4. Inadequate Organizational resources(IOR); 5. Organizational structural & procedural Characteristics (OSPC). The third part consists of questions related to coping strategies, faculty members prefer to reduce or eliminate stress, developed by Gmelch [27].The research is conducted in natural settings at cross-sectional level. Around 350 questionnaires were sent to

permanent faculty members of 17 Public & 14 Private Business schools/institutions of Punjab. First the stratified random sampling is done to make two strata belonging to Public and Private sector Business Schools. Then number of faculty members from public & private universities is determined according to the proportional allocation which is 147 from Public and 203 from Private sector Business Schools. Convenience sampling technique is used to collect the data from the permanent full time male & female faculty members. Out of 350 questionnaires, 300 questionnaires were return and used for the analysis.

V. RESULTS

Multiple regression analysis is applied to determine the significance predators of faculty stress. Table I displays the significance of F-statistics (p-value<0.05) verifying that the regression model is highly reliable to predict variance in faculty stress.

TABLE I
ANALYSIS OF VARIANCE(FACULTY STRESS IN PUBLIC & PRIVATE BUSINESS SCHOOLS)

Sum of Squares	Df	Mean Square	F	Sig.
213.740	6	35.623	72.876	.000 ^a
142.247	291	.489		
355.987	297			

a. Predictors: (Constant), IOR, PPR, SRI, OSPC, WL, RC

Table II shows the multiple regression model for faculty stress with independent variables . it is found that workload, student related issues & role conflicts are the factors significantly associated with faculty stress (p-value < 0.05). whereas variables such as poor peer relationships , inadequate resources and organizational structural & procedural characteristics have no impact on the faculty stress (p-value >0.05).

TABLE II
MULTIPLE REGRESSION MODEL FOR FACULTY STRESS WITH INDEPENDENT FACTORS

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.366	.207		1.764	.079
Workload	.453	.072	.351	6.321	.000*
Poor Peers Relationships	.081	.053	.073	1.545	.124
Student Related Issues	.214	.051	.206	4.221	.000*
Role Conflicts	.135	.029	.283	4.692	.000*
Organizational Structural & procedural Characteristics	-.024	.047	-.029	-.507	.613
Inadequate Organizational Resources	.073	.067	.061	1.087	.278

(* Significant at 0.05 level, 2-tailed)

Moreover independent t-test and one way ANOVA are applied to check whether any significant difference exists among the stress scores of faculty members of different background variables such as gender, age, salary, qualification & designation. Table III shows that there is a significant difference exists between the stress scores of male & female faculty members (p-value<0.05). According to the stress means, female faculty members experience more stress (mean, 3.88) as compared to male faculty members (mean 3.22). The reason behind females experiencing more stress is embedded in Pakistani cultural settings. In Pakistan, there is generally high pressure exerted on females to maintain balance between job & family demands, moreover, working in a male-dominated society is another cause of experiencing more stress as compared to male faculty members. The table also shows that faculty in Private sector Business schools experience more stress (mean 3.52) as compared to faculty in Public sector Business Schools (mean 3.26), thus significant difference exists among the stress scores of Public & private sector faculty members (p-value <0.05).

TABLE III
COMPARISON OF THE MEANS FOR OVERALL STRESS BETWEEN THE MALE & FEMALE FACULTY MEMBERS

	Gender	N	Mean	Std. Deviation	t-value	Sig.
Stress	Male	213	3.22	1.11	5.379*	0.00*
	Female	85	3.88	0.89		
Stress	Institution				-2.003	0.046*
	Public	129	3.26	1.10		
	Private	169	3.52	1.08		

(*Significant at 0.05 level, 2-tailed test)

Table IV shows that there is significant difference exists among the stress scores of faculty members at different designation levels (p-value <0.05). According to Table V, the average stress of faculty at lower designation is higher as compared to faculty at higher designation (Average stress scores moves in descending order), resulting that as the designation moves up, the stress level moves down.

TABLE IV
ONE-WAY ANOVA REPRESENTS OVERALL STRESS & DESIGNATION

Stress	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	86.61	4.00	21.65	23.55	*
Within Groups	269.38	293.00	0.92		
Total	355.99	297.00			

(* Significant at 0.05)

TABLE V
MEANS OF THE STRESS EXPERIENCED AT DIFFERENT DESIGNATION LEVELS

Designation	N	Mean	Std. Deviation
Lecturer	203	3.68	0.92
Assistant Professor	45	3.48	0.99
Associate Professor	4	1.58	1.17
Professore	23	2.40	0.98
Dean/HoD	23	2.18	1.21

Table VI shows that significant difference exists among the stress scores of faculty members at different qualification level (p-value<0.05). Table VII shows the average stress scores of faculty members at different qualification level. It is clearly found that faculty, who are at lower level of qualification experience more stress as compared to faculty who are at highly qualified. Thus stress scores and qualification also moves in opposite direction. The higher the qualification level, the lower the stress scores.

TABLE VI
ONE-WAY ANOVA REPRESENTS STRESS & QUALIFICATION

ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	74.27	3.0	24.7	25.8	0.00*
Within Groups	281.72	294.0	0.9		
Total	355.99	297.0			

(* Significant at 0.05)

TABLE VII
AVERAGE STRESS SCORES WITH RESPECT TO DIFFERENT QUALIFICATION LEVELS

Descriptive			
Qualification	N	Mean	Std. Deviation
	169.0		
Masters	0	3.69	0.95
MPhil/MS	75.00	3.51	0.81
Phd	8.00	2.94	1.33
Post-Doc	46.00	2.28	1.23

The ANOVA table VIII clearly shows that there is highly significant differences exist among the stress scores of faculty members at different salary scales (p-value<0.05). Table IX shows the average stress of faculty members in different salary ranges which tells that low salary level produce more stress as compared to high salary levels.

TABLE VIII
ONE-WAY ANOVA REPRESENTS STRESS & SALARIES

Stress	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	46.666	4	11.666	11.051	.000*
Within Groups	309.321	293	1.056		
Total	355.987	297			

(* Significant at 0.05 level)

TABLE IX
AVERAGE STRESS SCORES WITH RESPECT TO DIFFERENT SALARY RANGES

Salary Range in Rs.(000)	N	Stress Mean	Std. Deviation
Below 25	61	3.83	0.86
25-34	113	3.58	0.91
35-44	44	3.53	1.01
45-54	7	2.95	1.34
55 and Above	73	2.76	1.27

The result of the One-way ANOVA(table X) shows that there is highly significant difference exists among the stress scores of faculty members because of their ages (p-value <0.05).

TABLE X
ONE-WAY ANOVA REPRESENTS STRESS & AGES

Stress	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	64.813	3	21.604	21.81	.000*
Within Groups	291.174	294	.990		
Total	355.987	297			

(* Significant at 0.05)

The descriptive (table XI) showing the average stress scores of faculty members with respect to their ages are as follows:

TABLE XI
AVERAGE STRESS SCORES WITH RESPECT TO DIFFERENT AGE LEVELS

Age in (years)	N	Mean	Std. Deviation
Below 30	163	3.84	0.97
30-39	73	3.51	0.82
40-49	43	2.93	1.23
50 & Above	19	1.96	1.22

The descriptive table XI shows as high average stress scores is associated with the young faculty members as compared to older ones. As the age increases, the stress decreases.

The leading stress coping strategies are also identified by the faculty members of the Business Schools. Table XII shows

the leading stress coping strategies used by faculty members.

TABLE XII
RANKINGS OF THE COPING STRATEGIES USED BY FACULTY MEMBERS IN PRIVATE SECTOR

Rank	Stress Coping Strategies	Mean
1	Physical Activity	2.27
2	Self-management techniques	2.23
3	Personal interests	2.13
4	Entertainment	2.12
5	intellectual stimulation	2.10
6	Supportive Attitude	2.04
7	Social interaction	1.88

(Measure on 5-point semantic differential scale; 1 as Most Helpful to 5 as Least Helpful)

It is found from table XII that the most helpful strategy for coping stress preferred by the faculty members is Physical activity with the highest mean, following Self-management techniques, personal interests, entertainment, intellectual stimulation, supportive attitude and social interaction.

VI. RESULTS AND DISCUSSIONS

Faculty stress at higher education is becoming one of the major issues around the world. As compared to job stress in corporate world, educational institutions were considered to be a sector with low stress at work. With the recent developments such as increased competition, high rate of return etc at the higher education in Pakistan, educational institutions are occupying great deal of attention. The study yield many significant results for the policy makers of Business Institutions. On General, stress is found to be more distracting in Private sector business schools as compared to Public sector. Moreover, female faculty experience more stress as compared to male faculty members. A big reason behind the females having more stress is embedded in working in male-oriented society which is supported by many previous researches such as Flowers [28], Jick & Mitz [29], Nelson & Hitt [30] as well as the interviews conducted by the researcher with the female faculty members of the Business Schools of Punjab. It is found that Workload is the most important stressor from males & female faculty's point of view. The study also found significant insights in the average stress scores of faculty members in these schools with respect to various background variables. It is found that average stress scores of the faculty members in the Business Schools have significant differences due to their designation, as high stress is associated with lower designations, i.e. Lecturer, Assistant Professors. So stress & designation moves in opposite direction; higher the designation, lower will be the stress. Similarly, high stress is associated with faculty members having low qualification and as the qualification increases, stress decreases. The relationship of stress & salaries is also investigated and found that low salaried members experience

high stress as compared to high salaried faculty members. Whereas stress & age also moves like other background variables, it means that younger age members experience more stress as compared to older ages. The study findings have accomplished the objectives set at start, yet it still requires a great deal of work regarding the effects of stressed faculty on various institutional outcomes such as effects on turnover, quality education, low productivity & hi-absenteeism etc This study will invite further research to explore, implement and evaluate intervention strategies for prevention of stress and improvement in job satisfaction of faculty in other disciplines as well, such as engineering, literature etc, in Pakistan.

ACKNOWLEDGMENT

First of all, I bow my head in deep gratitude to “Almighty Allah” who endowed me with the potential & ability to make significant contribution to the previous existing base of knowledge. I express my sincere appreciation to Dr. Waheed Akhter, of COMSATS Institute of Information Technology, Lahore Campus, for his guidance and support throughout the research. I am deeply appreciative to Muhammad Akram Naseem, Executive at Statistics Department in State Bank of Pakistan, for his support regarding statistical analysis. Lastly, I am sincerely grateful to my family (Parents & siblings) for the inspiration and moral support. I would not be here without their tremendous encouragements.

REFERENCES

- [1] Gmelch, W. H. (1993). *Coping with faculty stress*. New York: Sage Publications.
- [2] Dinham, S.; & Scott, C. (1998, April 13–17). An international comparative study of teacher satisfaction, motivation and health: Australia, England, and New Zealand, American Educational Research Association
- [3] Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Research*, 53(1): 27-35
- [4] Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P. & Millet, C. (2006). The experience of work related stress across occupations. *Journal of Managerial Psychology*, 20, 178-187
- [5] Bowen, Howard, and Schuster, Jack (1986). *American Professors: A National Resource Imperiled*. New York: Oxford University Press
- [6] Smith, Earl., Anderson, L.J., & Lovrich, P.N. (1995). The Multiple sources of workplace stress among land-grant university faculty. Springer Publishers, *Research in Higher Education*, Vol. 36, No. 3, pp. 261-282
- [7] Gmelch, W. H., Wilke, P. K., & Lovrich, N. P. (1986). Dimensions of stress among university faculty: Factor-analytic results from a national study. *Research in Higher Education*, 24, 266–286.
- [8] Daniels, K., & Guppy, A. (1992). Control, information-seeking preferences, occupational stressors and psychological well-being. *Work and Stress*, 6, 347– 353.
- [9] Boyd, S., & Wylie, C. (1994). *Workload and stress in New Zealand universities*. Auckland, New Zealand: New Zealand Council for Educational Research and the Association of University Staff of New Zealand.
- [10] Blix, A. G., Cruise, R. J., Mitchell, B. M., & Blix, G. G. (1994). Occupational stress among university teachers. *Educational Research*, 36, 157–169
- [11] Bradley, J., & Eachus, P. (1995). Occupational stress within a U.K. higher education institution. *International Journal of Stress Management*, 2, 145–158..
- [12] Wiley, C. (2000, June). A synthesis of research on the causes, effects, and reduction of strategies of teacher stress. *Journal of Instructional Psychology*, 27(2): 80-87G. O. Young, “Synthetic structure of industrial plastics (Book style with paper title and editor),” in *Plastics*, 2nd ed. vol. 3, J. Peters, Ed. New York: McGraw-Hill, 1964, pp. 15–64.
- [13] McGrath, J. E. (1976). Stress and behavior in organizations. In M. D. Dunnette (Ed.), *Handbook of Industrial and Organizational Psychology*. Chicago, IL: Rand McNally, 1351-1395
- [14] Lazarus, R. S. (1984). Puzzles in the study of daily hassles. *Journal of Behavioral Medicine*, 7: 375-389.
- [15] Eckert, R.S., and Williams, H.Y. (1972). *College Faculty View Themselves and Their Jobs*. Minneapolis: University of Minnesota, 1972.
- [16] Shull, F. A. Jr. (1972) Professional stress as a variable in structuring faculty roles. *Educational Administration Quarterly*, 8(3), 49-67
- [17] TUC (2004). *Focus on Health and Safety, Trade Union Trends Survey*
- [18] Dewe, P. (1986). An investigation into the causes and consequences of teacher stress. *New Zealand Journal of Educational Studies*, 21 (2), 145-157.
- [19] Manthei, R. and Solman, R. (1988). Teacher stress and negative outcomes in Canterbury state schools. *New Zealand Journal of Educational Studies*, 23, 145- 163.
- [20] Kinman, G. (2001). Pressure points: A review of research on stressors and strains in UK academics. *Educational Psychology*, 21, 473–492.
- [21] Gmelch, W. H. (1984, April). Educators’ responses to stress: Towards a coping taxonomy. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.
- [22] Cooper, C., Dewe, P. J., & O’Driscoll, M. P. (2001). *Organizational stress: A review and critique of theory, research, and applications*. Thousand Oaks, CA: Sage
- [23] Griffith, J., Steptoe, A., and Cropley, M. (1999). An investigation of coping strategies associated with job stress in teachers. *British Journal of Educational Psychology*, 69 (4), 517-531.
- [24] Ramage, J. (2001). The identification of work place stressors by academic staff at Hutt Valley Polytechnic. Unpublished manuscript. Victoria University: Graduate School of Business and Government Management.
- [25] Hardie-Boys, N. (1996). *Workload and stress: a report of ASTE members*. Wellington: New Zealand Council for Educational research and Association of Staff in Tertiary Education
- [26] Abouserie, R. (1996). Stress, coping strategies and job satisfaction in university academic staff. *Educational Psychology*, 16, 49–56.
- [27] Gmelch, W.H. (1988). Educators’ response to stress: Towards a coping taxonomy. *Journal of Educational Administration*, 24(3), 72-81.
- [28] Flowers, L. (2001). *Women, faith and work: How ten successful professional blend belief and business*. Nashville, TN: World Publishers.
- [29] Jick, T.; & Mitz, L. (1985). Sex differences in work stress. *Academy of Management Review*, 10: 408-420..
- [30] Nelson, D.; & Hitt, M. (1992). Employed women and stress: Implications for enhancing women’s health in the workplace. In Quic, Murphy & Hurrell (Eds.), *Stress and Well-Being at Work: Assessments and Interventions for Occupational Mental Health*, 164-177. Washington, D.C.: American Psychological Association.