

Effect of Teacher's Stress on Job Performance and Job Satisfaction among University Teachers: Moderating Role of Positive and Negative Emotions

Haleema Parveen

Ph. D Scholar Department of Psychology, Preston University Islamabad, Pakistan

Mehr Bano, Ph.D.

Professor of Psychology, Preston University Kohat, Pakistan

Mehreen Hashmi

Visiting Faculty Member Sociology, Gender Studies Bahauddin Zakariya University, Multan, Pakistan

Amir Shareef

Research Scholar (Pakistan Studies) NCBA&E Multan Campus, Pakistan

Abstract

The present study examined the interactive effect of teacher's stress and emotions on the prediction of job performance and job satisfaction of university teachers. In this cross-sectional research, Teacher's Stress Inventory by (Schutz and Long), Emotions in Teaching Inventory by (Diefendorf et al.), Teacher's Performance Scale by (Kim and Richard) and Teacher's Satisfaction Scale by (Ho and Au) were used to collected data from 200 participants. Moderation analysis was carried out using Process Software which explained that positive emotions moderated the relationship between teacher's stress and job performance. Positive and negative emotions also moderated the relationship between teacher's stress and job satisfaction of the teachers. The findings have applied significance in the higher education institutions with respect the role of emotions in teacher's stress and outcomes relationship.

Key Words: Teacher's stress, positive emotions, negative emotions, job performance and job satisfaction

I. Introduction

Stress is a situation of anything which is perceived threatening for the overall well-being of an individual (Harvey). There are individual differences in the stress perception of the people (Benson). Stress is also occupation specific. Teacher's stress is combination of certain stressors like role ambiguity, role stress, organizational management, lower job satisfaction, decreased life satisfaction, task stress and lower supervisory support (Schutz & Long). In the stress-outcome relationship, teacher's emotions play a

vital role. Both positive and negative emotions are experienced by the teachers.

Positive emotions comprised of motivation, pride, confidence, satisfaction and happiness whereas negative emotions are anxiety, embarrassment, frustration, boredom and annoyance (Diefendorf et al).

The study has mainly focused on the predictors of job performance and job satisfaction among university teachers as stress directly affects job performance (Akgunduz,; Ali et al.) and satisfaction.

Job performance is related to the combination of behaviors and job related activities that performed to achieve the goals of the organization (Butler & Rose). However, job satisfaction is employee's level of contentment with a specific job (Shajahan & Shajahan). Due to close association, job performance and satisfactions are considered as two faces of the same coin (Judge et al.). Teacher's stress in interaction with emotions influences these job outcomes.

II. Literature Review

Researcher of the indigenous context realized the importance of studying stress in the higher education institutions of Pakistan. Taking the both sides of issue, the researchers not only examined the level of stress in the universities (Riaz) but also worked on its correlates like job performance and satisfaction (Akhtar). However, the researchers overlooked the role of personal factors contributing to performance and satisfaction at job (Yang & Hwang) even in the presence of stress. Evidences from the individualistic as well as collectivistic context similarly confirmed the role of stress in diminishing performance and satisfaction at job (Ali et al; Reilly et al.). However, literature on the buffering role of emotions at times of stress is still debilitating. In spite of the great importance of emotions for teachers, even a single empirical study was not conducted in the indigenous educational institutions to examine the moderating effect of positive and negative emotions in the relationship between stress and job related outcomes.

Emotions linked factors have between reported to moderated between stress and

job performance (Yozgatet al.). Indigenous research with teachers shed light on the direct effect of stress on job performance (Tahir,) and satisfaction (Manzoor et al.). Thus the link between stress and its negative effects on job outcomes has been firmly established in the indigenous as well as international context (David,; Klassen & Chiu,; DeNobile & McCormick .Knowing that teacher's stress leads towards lower job performance and decreased satisfaction is one side of the coin. The other side is to work on the factors that reduce the negative effect of stress on job outcomes of teachers. In this regard, educational researchers have widely recognized the role of teacher's emotions that can be either positive or negative (Diefendorf et al.,). Positive emotions server as resilient factors which buffers against the negative effects of stress (Anari).

Positive emotions can be used for defusing stress as the stress severity can be reduced by inculcating positive emotions. Moreover the risk to be stressed can be lessened by using positive emotions (Onget al.).Positive emotions serve dual functions as they reduces the effects of stress and enhance job performance and job satisfaction. Thus stress-buffering positive emotions are used by the teachers as coping mechanisms during the elevating effects of stress (Fredrickson).Keeping in view the existing literature, the study intended to investigate the moderating effect of teacher's emotions (positive and negative) between teacher's level of stress and outcomes including job satisfaction and job performance in university teachers.

Hypotheses

H1. Positive emotions will moderate between teacher's level of stress and job satisfaction in teachers.

H2. Negative emotions will moderate between teacher's level of stress and job performance in teachers.

H3. Positive emotions will moderate between teacher's level of stress and job satisfaction in teachers.

H4. Negative emotions will moderate between teacher's level of stress and job performance in teachers.

III. Conceptual Framework

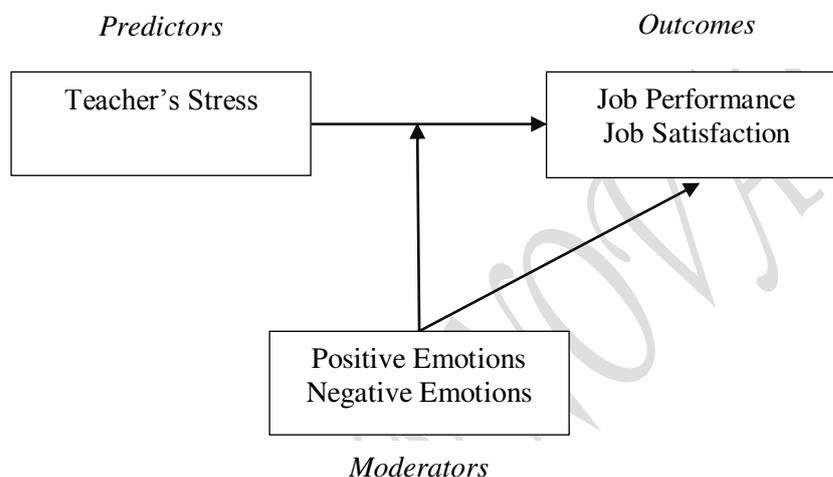


Figure 1: Schematic representation of the moderating role of emotions between teacher's stress and outcomes

IV. Methodology

The present study is a survey research in which "cross-sectional survey research design" was used to collect the information from university teachers. The method of the study is correlational as mediation and moderation is computed

V. I Participants

Non probability convenient sampling technique was used in the present study. The sample consisted of university teachers ($N = 200$) with the age range from 28-60 years ($M = 35.72$, $SD = 6.51$). Teachers were selected with equal proportion of male teachers ($n = 100$,

50%) and female teachers ($n = 100$, 50%). Teachers were selected from public sector universities ($n = 100$, 50%) and private sector universities ($n = 100$, 50%). The sample was drawn from universities of four cities of Pakistan including Lahore ($n = 50$, 25%), Multan ($n = 50$, 25%), Sargodha ($n = 50$, 25%) and Islamabad ($n = 50$, 25%).

V.II Instruments

Teacher's Stress Inventory by (Schutz and Long) consisting of 36 items and 7 subscales including role ambiguity, role stress, organizational management, job satisfaction, life satisfaction, task stress,

and supervisory support was administered. The subscales comprised of 5, 7, 5, 4, 5, 6 and 4 items respectively. The scale has positively worded items rated on 5-point rating scale with response categories as 1 for strongly disagree and 5 for strongly agree. The score ranged from 36-180 for overall scale. The reliability is .70 for overall scale.

Emotions in Teaching Inventory by (Diefendorf et al.) comprising of 20 items and 2 subscales including positive emotions and negative emotions measured with 10 items for each subscale. The scale has positively worded items rated on 5-point rating scale with responses ranging from 1 for strongly disagree and 5 for strongly agree. The scores ranged from 10-50 for positive and negative emotions and 20-100 for overall scale. The reliability is .94, .88, and .93 for positive emotions, negative emotions and overall scale.

Teacher's Performance Scale by Kim and Richard comprising of 28 items and 4 subscales including attitude towards students, subject mastery, teaching method, personal characteristic was used. V. Each subscale comprised of 7 positively worded items rated on 5-point rating scale with response option ranging from 1 for never and 5 for always. The score range is 28-140 for overall scale. The reliability is .88 for overall scale.

Teacher's Satisfaction Scale by Ho and Au consisted of 25 positively worded items was used. The scale is rated on 5-point rating scale with response categories ranging from 1 for strongly disagree and 5 for strongly agree. Score range is 25-125

for overall scale. The reliability is .77 for overall scale.

V.III Procedure

For the purpose of the present research, the permission to use the scales was taken from respective authors. Participants were selected through non-probability convenient sampling technique. The researcher visited universities situated in Lahore, Multan, Sargodha and Islamabad. Informed consent was sought in written from each participant after explaining the nature and purpose of the research. Data was collected from individual participants and no incentive was given for providing information. All the queries were answered by the researcher before, during and after completion of scales. The participants didn't take more than 15 minutes for the completion of scale and the return rate was 85%. As the participants were given no incentive, they were thanked for their voluntary participation. The data collected was then analyzed through SPSS-22 and results were reported honestly.

Results and Discussion

Descriptive statistics will be computed to describe the important aspects of the data. Alpha reliability coefficients were computed to examine the internal consistency of the scales. Skewness and kurtosis values were computed to see the normality of the data on variables. Pearson correlation was computed to see the correlations or association between study variables. Hierarchical regression analysis was applied to compute the mediation and moderation.

Results

Table 1: Psychometric properties and Pearson correlation among study variables

Variables	1	2	3	4	5
1. Teacher's stress	-	-.73**	-.06	-.15*	-.85**
2. Positive emotions		-	.11	.15*	.74**
3. Negative emotions			-	-.16*	-.02
4. Job performance				-	.17*
5. Job satisfaction					-
Mean	113.31	31.63	37.40	84.84	15.85
SD	30.00	9.46	6.37	16.17	4.3
Alpha coefficients	.80	.86	.92	.88	.78
Potential range	36-180	10-50	10-50	28-140	5-25
Actual range	39-168	12-50	10-50	45-122	6-24
Skewness	-.06	-.01	-.56	-.15	-.01
Kurtosis	.04	-.06	-.56	-.15	-.00

* $p < .05$. ** $p < .01$.

Table 1 shows that all scales have greater than .70 Alpha reliability coefficients which indicates that all variables of the study have satisfactory internal consistency. The values of skewness and kurtosis for all variables are less than +1 and -1 which indicates that data is normally distributed. Teacher's stress has significant negative correlation with job

performance and job satisfaction. Positive emotions have significant positive correlation with job performance and job satisfaction. Negative emotions have significant positive correlation with job performance. Job performance has significant positive correlation with job satisfaction. The remaining correlation coefficients are non-significant.

Table 2: Regression analyses examining the moderating effect of positive emotions in the relationship between teachers' stress and outcome including job performance and job satisfaction

Predictors	<i>B</i>	<i>SE</i>	95%CI <i>LL, UL</i>
Outcome: Job performance			
Constant	86.92***	1.58	[89.79, 90.04]
Teachers' Stress	-.10	.06	[-.24, .03]
Positive Emotions	.04	.17	[-.31, .39]
Teacher's Stress x Positive Emotions	.01*	.005	[.001, .02]
Low Positive Emotions	-.20*	.10	[-.40, .004]
Moderate Positive Emotions	-.10*	.06	[-.244, .03]
High Positive Emotions	-.01	.05	[-.12, .10]
R^2	.04		

<i>F</i>	2.79*		
Outcome: Job performance			
Constant	84.84***	1.14	[82.58, 87.10]
Teachers' Stress	-.08*	.03	[-.16, -.01]
Negative Emotions	-.44*	.20	[-.84, -.04]
Teacher's Stress x Negative Emotions	.01	.005	[-.009, .01]
<i>R</i> ²	.05		
<i>F</i>	3.22*		
Outcome: Job satisfaction			
Constant	16.53***	.20	[16.12, 16.93]
Teachers' Stress	-.11***	.01	[-.13, -.10]
Positive Emotions	.07**	.02	[.02, .12]
Teacher's Stress x Positive Emotions	.003***	.001	[.002, .004]
Low Positive Emotions	-.14***	.01	[-.17, -.12]
Moderate Positive Emotions	-.11***	.008	[-.13, -.10]
High Positive Emotions	-.08***	.007	[-.10, -.07]
<i>R</i> ²	.79		
<i>F</i>	254.10***		
Outcome: Job satisfaction			
Constant	15.82***	.15	[15.51, 16.13]
Teachers' Stress	-.12***	.004	[-.13, -.11]
Negative Emotions	-.08**	.02	[-.13, -.02]
Teacher's Stress x Negative Emotions	-.002**	.001	[-.003, -.001]
Low Negative Emotions	-.11***	.006	[-.12, -.09]
Moderate Negative Emotions	-.12***	.004	[-.13, -.11]
High Negative Emotions	-.13***	.005	[-.14, -.12]
<i>R</i> ²	.74		
<i>F</i>	254.10***		

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2 shows that positive emotions moderated the relationship between teacher's stress and job performance. Negative emotions did not moderate the relationship between teacher's stress and job performance. Both positive and negative emotions moderated the relationship between teacher's stress and job satisfaction.

Discussion

Past research (Cox et al., 2000) confirmed that stress at work is linked with

unproductive behaviors at workplace. Along with stress along with emotions influences the performance and satisfaction of university teachers. The first hypothesis "positive emotions will moderate between teacher's level of stress and job performance in teachers" was supported in this empirical study. Positive use of emotions has buffering effect in the stress and job performance relationship (Yozgat et al., 2013). Thus in the higher education institution, there are situations when stress leads towards negative

consequences in terms of reducing job performance (Akhtar, 2016), positive emotions can reduce the adverse effects of stress.

The positive emotions have substantial effects on the stress-performance association, but negative emotions make no contribution in this regard as the hypothesis “negative emotions will moderate between teacher’s level of stress and job performance in teachers” was not supported by the empirical data. This might be the reasons that researchers (Larsen & Christenfeld, 2010) even suggest ways like cognitive restructuring to change negative emotion into positive. The academicians with high of emotional intelligence (which is linked with positive use of emotions) were more competent to manage stress as compared to their lower level counterparts (Kaut & Saroj, 2010; Jude, 2011) and results in more instrumental effectiveness. Having positive emotions yield overall positive influence on teaching practices (Saric).

Stress and stressors strongly influence job performance (Karatepe). However, there is a practical lesson as the present research proved that in the conditions when stress is influencing job performance of teachers, negative emotions contribute nothing to prevent teachers from the adverse effects of stress manifesting in the form of lower job performance. Due to this reason, researchers (Kellret) emphasize on enabling teachers to suppress negative emotions and use positive emotions. Not only the behaviors of but teachers but also their students’ behaviors largely depend upon teachers’ emotions (Sutton & Wheatley). The effectiveness of positive emotions in not limited to job performance. Reviews of existing

researches (Fried et al.) directly link emotions with job satisfaction in educational institutions.

Thus the hypothesis “positive emotions will moderate between teacher’s level of stress and job satisfaction in teachers” was supported through data. Researchers explain that positive emotions powerfully contribute to job satisfaction of teachers (Fisher & Ashkanasy) contrary to the negative emotions which yield adverse effects. In line with the existing body of knowledge, the hypothesis “negative emotions will moderate between teacher’s level of stress and job satisfaction in teachers” was proved in the present investigation. In interaction with the teacher’s stress, the negative emotions escalate that negative effects of stress on job satisfaction of the teachers. Thus, helping teachers in getting mastery over the effective use of positive emotions and subduing negative emotions is the need of the time (Kellret).

Limitations and Recommendations

The present study was based on the cross-sectional survey research design which usually instills low internal validity, thus casual inferences cannot be drawn. In future research, use of triangulation (mixed-method approach) can be beneficial to overcome these limitations in-built in the design of the study. The correlation method used to draw inferences is also vulnerable for confounding variables. Cross-rating was not done to avoid common method variance thus social desirability may influence the rating of different variables. More specifically self-report data was collected on job performance from the teachers which are vulnerable for social desirability. In future

research job performance of the teachers should be evaluated by their heads or 360⁰ performance appraisal system should be applied. Beside all these limitations, the present study is pretty insightful in understanding the direct and interaction effect of teacher's stress and emotions on job outcomes.

Implications

The present study was based on moderated model in which numerous applied insights are sought through findings. The study also examined the moderating effect of positive and negative emotions in the relationship between teacher's stress and job outcomes. Teaching is profession which involves frequent human interaction and interpersonal sensitivities in which emotions play vital role in managing the effects of stress and stressors of teachers on their job performance and satisfaction. Thus the study confirmed that when stress influences the job performance and satisfaction of teachers, emotions (either positive or negative) influence this relationship. In the light of the empirical insights collected through present study, specialized training programs should be launched for the learning of teachers regarding use of positive emotions in stressful situations at work.

Work Cite:

1. Akgunduz, Y. "The influence of self-esteem and role stress on job performance in hotel businesses." *International Journal of Contemporary Hospitality Management* (27(6).10.1108/IJCHM-09-2013-0421)
2. Akhtar, M. "Psychological outcomes of time management behaviour among university teachers: Mediating role of perceived control of time." *International Islamic University, Islamabad*: 2016.
3. Ali, K., Ishtiaq, I., & Ahmad, ."Occupational stress effects and job performance in the teachers of schools of Punjab." *International Journal of Academic Research in Business and Social Sciences* (Vol.3 No.11.2013): 665-680.

Conclusion

The present study was based on moderated-mediation model in which teacher's stress and its job-related outcomes (job performance and job satisfaction) were mediated by coping styles and moderated by positive and negative emotions. Thus university teachers were approached through convenient sampling. Hierarchical regression analysis revealed that teacher's stress has both direct and indirect effect on job performance and job satisfaction of university teachers. More clearly, coping styles mediated between teacher's stress and outcomes related to job which explains that teachers employ coping strategies during stress which influence their job performance and satisfaction. Moreover, positive and negative emotions moderated the relationship between teacher's stress and two work related attitudes including job performance and satisfaction. The findings confirmed that when stress influences job outcomes, positive emotion play the role of buffer against the adverse effects of stress. However, negative emotions escalate the negative effects on stress on work outcomes among teachers.

4. Ali, W. U., Raheem, A. R., & Nawaz, A. "Impact of Stress on Job Performance: An Empirical study of the Employees of Private Sector Universities." *Research Journal of Management Sciences* (Vol.3, No.7.2014): 14-17.
5. Anari, N. "Teachers: emotional intelligence, job satisfaction, and organizational commitment." *Journal of workplace Learning* (Vol.24, No.4, 2012): 256-269.
6. Benson, J. E. "Reevaluating the "subjective weathering" hypothesis: Subjective aging, coping resources, and the stress process." *Journal of Health and Social Behavior*, (Vol.55, No.1. 2014): 73-90.
7. Butler, M. & Rose, E. *Introduction to Organizational Behaviour*, Edited London: Chartered Institute of Personnel & Development. London: Sage Publications, 2011.
8. David, C. B. "Poverty and potential: Out-of-school factors and school success." Retrieved from http://www.greatlakescenter.org/docs/Policy_Briefs/Berliner_NonSchool.pdf 2014
9. De Nobile, J. J. & McCormick, J. (2005), Job satisfaction and occupational stress in Catholic primary schools, a paper presented at the Annual Conference of the Australian Association for Research in Education, Sydney: 2005.
10. Diefendorff, J.M., Croyle, M.H., & Gosserand, R.H. "The dimensionality and antecedents of emotional labor strategies." *Journal of Vocational Behavior* (Vol.66, 2005): 339-357.
11. Fisher, C.D. & Ashkanasy, N.M. "The emerging role of emotions in work life: An introduction." *Journal of Organizational Behavior* (Vol.21, No.2, 2000): 123-129.
12. Fredrickson, B. L. "Broaden-And-Build Theory of Positive Emotions." *Encyclopedia of Social Psychology*. (2001): 75
13. Fried, L., Mansfield, C., & Dobozy, E. "Teacher emotion research 2003-2011: Constructing a conceptual model for future research, (2012).
14. Harvey, A., et al. "Threat and challenge: Cognitive appraisal and stress responses in simulated trauma resuscitations." *Medical Education* (Vol.44 No.6, 2010): 587-94.
15. Ho, C. & Au, L. "Teaching satisfaction scale: Measuring job satisfaction of teachers." *Educational and Psychological Measurement*, (2006):172-185.
16. Jude, A.M., "Emotional intelligence, gender and occupational stress among secondary school teachers in Ondo State." *Pakistan Journal of Social Sciences* (Vol. 8 No. 4, 2011):159-65.
17. Judge, T. A., et al. "Hierarchical representations of the five-factor model of personality in predicting job performance: integrating three organizing frameworks with two theoretical perspectives." *Journal of Applied Psychology* (Vol.98, No.6, 2013): 875.
18. Karatepe, O. M. "High-performance work practices, work social support and their effects on job embeddedness and turnover intention." *International Journal of Contemporary Hospitality Management* (Vol.25, No.6, 2013).
19. Kauts, A. & Saroj, R. "Study of teacher effectiveness and occupational stress in relation to emotional intelligence among teachers at secondary stage." *Journal of History and Social Sciences* (Vol.1, No.1, 2010).

20. Keller, M. M., Chang, M., Bekker, E. S., Goetz, T., & Frenzel, A. C. "Exploring teacher emotions: a literature review and an experience sampling study in Teacher Motivation: Theory and Practice. New York, 2014.
21. Kim, E.C. & Richard, D.K. "A Resource Guide for Secondary School Teaching. Macmillan Publishing Company: New York, 1991. 435-438.
22. Klassen, R. M., & Chiu, M. M. "The occupational commitment and intention to quit of practicing and pre-service teachers: Influence of self-efficacy, job stress, and teaching context." *Contemporary Educational Psychology* (Vol.36, No.2, 2010): 114-129.
23. Manzoor, M. U., Usman, M., & Naseem, M. A. "A Study of Job Stress and Job Satisfaction among Universities Faculty in Lahore, Pakistan." *Singaporean Journal Scientific Research* (Vol. 2, No.1, 2009): 1-4.
24. Ong. "Psychological resilience, positive emotions, and successful adaptation to stress in later life." *Journal of Personality and Social Psychology* (Vol.91, No.4, 2006): 730-749.
25. Reilly, et al. "The natural causes of job satisfaction." In *Handbook of Industrial and organizational psychology*: Chicago, 2014. 1297-1349.
26. Riaz, M. N. "Leadership styles as predictor of decision making styles: Moderating role decision related factors: Islamabad, 2015.
27. Šarić, M. "Teachers' emotions: A research review from a psychological perspective." *Journal of Contemporary Educational Studies*, 2015: 16-17.
28. Schutz, R.W., & Long, B.C. "Confirmatory factor analyses, validation and revision of a teacher stress inventory." *Educational and Psychological Measurement* (Vol.48, 1988): 497-511.
29. Shajahan, D. S. & Shajahan, L. *Organization behaviour*: New Age International Publications, 2004.
30. Sutton, R.E. & Wheatley, K. "Teachers' emotions and teaching: A review of the literature and directions for future research." *Educational Psychology Review* (Vol. 15, No.4, 2003): 327.
31. Tahir, Q. A. "Effectiveness of teaching stress on academic performance of college teachers in Pakistan." *International Journal of Humanities and Social Science* (Vo.1, No.3, 2011): 123-129.
32. Yang, M., & Hwang. "Personality traits and simultaneous reciprocal influences between job performance and job satisfaction." *Chinese Management Studies* (Vol. 8, No.1, 2014): 6-26.
33. Yozgat, U., Yurtkoru, S., & Bilginoğlu, E. "Job stress and job performance among employees in public sector in Istanbul: Examining the moderating role of emotional intelligence." *Procedia-Social and Behavioral Sciences* (Vol.75, 2013): 518-524.