



Does Job Engagement Mediate the Relationship between Job Demands and Organizational Commitment of Academicians at Institutions of Higher Education Commission in Pakistan?

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Abstract- Every individual is exposed to different types of demands in the working environment. The demands may be either from the employees or administration of the organization. Conflict of interest and workload also affect the performance of the employees. In current study, the researchers aimed to investigate the importance of job demands and the strengths of the employees, i.e. job engagement of the faculty members and organizational commitments. The data was collected in 2017, contains 212 employees from Higher Education Institutions of Malakand Division Khyber Pakhtunkhwa (KP). Job engagement has been measured on the basis of the Utrecht Work Engagement Scale (UWES) (Schaufeli, Salanova et al. 2002). The findings suggest that demands have a negative effect on the job engagement and organizational commitment, while a positive effect between job engagement and organizational commitment. Furthermore, job engagement plays a full mediation between job demand and organizational commitment.

Keywords: Job Demands; Job Engagement; Organizational Commitment; Utrecht Work Engagement Scale

I. INTRODUCTION

Education plays a critical role in this emerging age of science and technology. Nations around the world emphasize the development of the educational system to uplift their social, economic and political lives. The world has experienced changes in the shape of globalization, technological expansion, resource constraints, political and religious conflicts. As a result, the workplace has been complicated and diverse due to the demands of ever-changing competitive working life. Academicians are experiencing the physical and emotional problem that inhibits their work performance and commitment (Khan, Rasli et al. 2020).

In the current situation, every individual is exposed to different types of demands in the working environment. The demands are either from employees, administration, conflict of interest, workload, or any others. In the same, it is clear from the literature that among all the professions, teaching is one of the stressful occupations (Travers and Cooper 1996; Khan, Yusoff et al. 2014). In 1991, Farber (1991) concluded that 20% of the academicians in the US are burnout due to different high demands in the working place. Similarly, the study demonstrated that academicians have a high level of exhaustion and disengagement (Schaufeli and Leiter 1996; Schaufeli and Enzmann 1998; Khan, Khan et al. 2018). From the above discussion, it has been concluded that negative aspects of teaching are more dominated in the recent changes in technological expansion and political interest in the teaching profession.

The Job Demands-Resources (JD-R) Theory has the combination of two processes that is energetic and a motivational process. It further creates a holistic model that may predict exhaustion and engagement. Given the differential impact of job demands, such a model is particularly suited to examine the multidimensional effects of demands on job engagement. Therefore, the researchers use the Job demands Resources theory (Bakker and Demerouti 2014; Bakker and Demerouti 2017; Khan., Khan et al. 2017) for his study to investigate the levels of demands, job engagement, and organizational commitment. Job Demands–Resources

theory will not only be used to include academicians' burnout and the associated process of energy-draining but also teacher engagement.

According to Pakistan economic survey for the years 2010-11, reported that 3.05 million of the labour force is unemployed, with a rate of 6.5%. Pakistan is on the border of poverty, with 43% of people. For the last two decades, the process of privatization occurs due to a decline in the investment of different sectors, the war on terror and the economic situation. Ideally, people are trying to elaborate on new employment and established self-employment in small and medium enterprises. Therefore, we selected Pakistan for the current study because Pakistan is one of the under research countries among the 12 developing countries in Asia (Aycaan, Kanungo et al. 2000; Khan, Khan et al. 2017).

Furthermore, the research study is restricted to the affected division in KP, i.e., Malakand, which is further divided administratively into six districts (Yusoff and Khan 2013). Therefore, the selected sites of data collection are three comprehensive universities of Pakistan located in the province of Malakand KP, where academicians of the three universities have taken as the sample of the study.

The purpose of the current research has to analyse the effect of the independent (job demands) and dependent (job engagement) variables and organizational commitment. Moreover, the study has also investigated the mediating effect of job engagement between demands and organizational commitment. On the other hand, engagement, demands and commitment have rarely focused in the context of Pakistan, particularly within universities of Malakand division, KP, Pakistan. Moreover, the current research will be significant in Pakistani perspectives because the environment of Pakistan, especially the Malakand division, is unstable due to security problems, energy crisis and terrorism. JD-R model shall use in this regard through cross-sectional analysis. The findings of the research will be beneficial to the researchers, individual academicians, administrators in the universities and policymakers for uplifting the overall standard of Higher Education (HE) in the targeted area. In contrast, policymakers will take the necessary actions to protect universities from the destructive effect of job burnout.

The findings of the research are expected to add to the body of knowledge regarding engagement, commitment and job demands in developing countries in general and in especially Pakistan. In the past, the majority of the studies have conducted on job demands and job engagement in developed countries like the United Kingdom, Netherlands, Australia (Winefield, Gillespie et al. 2003; Hakanen, Bakker et al. 2006; Winefield, Boyd et al. 2008; Khan, Rasli et al. 2014; Ventura, Salanova et al. 2014). Nonetheless, work on the current aspects in developing countries such as Pakistan is scanty.

The results of the research will be of vital importance to the researchers, students and academicians and policymakers. Furthermore, the findings of the research have been expected to serve as a guideline for future studies in examining the factors to job engagement and organizational commitment. The results will be of practical importance for the higher education institutions in Pakistan and elsewhere in the world.

Research Objectives

Based on the review of the existing literature, the research study will cover the following objectives:

1. To examine the effect of job demands on organizational commitment and job engagement among the academicians in universities of the Malakand division.
2. To investigate the mediating effect of job engagement on the relationship between job demands and organizational commitment among the academicians in universities of the Malakand division.

II. LITERATURE REVIEW

Job demands get importance in stress literature in the 1970s. Job demands have been considered multifold. Job demands are a series of complex factors. In short, job demands have no single definition which could be

assigned. Several researchers have explained demands in different ways, depending on the environment and situation where it is needed. Job demands, as defined by Sargent and Terry (1998) "is the amount of work required from the employee, the extent to which he or she has to work under time pressure, and the degree to which the employee has expected to complete conflicting job demands" (p. 219). Therefore, the research gives preference to the JDR model to further identify the relationship between the demands, engagement and organizational commitment among the employees of universities in Malakand Division KPK Pakistan (Bakker, Demerouti et al. 2003).

According to authors Schaufeli, Salanova, González-Roma and Bakker, (2002), job engagement is a positive, fulfilling, and work-related state of mind. Furthermore, it has characterized by three different sub-dimensions called vigor, dedication, and absorption. Vigor is defined as high levels of energy and mental resilience while working, the willingness to invest effort in their work, and persistence in the face of difficulties. Dedication is defined as a sense of significance, enthusiasm, inspiration, pride and challenge. At the same time, the third sub-dimension of work engagement is known as absorption, and defined as being fully concentrated and happily engrossed in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work. Vigor and dedication are the main dimensions of job engagement (González-Romá, Schaufeli et al. 2006). In contrast, studies also showed that vigor and dedication are the different dimensions of burnout dimension emotional exhaustion and disengagement (Benders, Bleijerveld et al. 2017).

Job demands result in both stress and burnout, Karasek (1979) developed a model as known as the Job Demands Control (JDC) model (Demerouti, Bakker et al. 2001). In contrast, the JDC model was criticized due to its simplicity because the nature of the organizations was more complicated. Similarly, Karasek (1979) had admitted that "In future research, it would be desirable to distinguish among the effects of numerous different facets of decision latitude, that is, concerning the skill, task management, time pace and organizational policy effects"(p-290) (Bakker. and Demerouti. 2007; Khan., Yusoff et al. 2014). Therefore, Janssen et al. (2001) and Schaufeli and Taris (2004) added social support to the model.

According to extension in the JDC model, a new model has developed for burnout, especially emotional exhaustion and disengagement (Demerouti, Bakker et al. 2001). This model was further extended by Schaufeli and Bakker (2004) and include new variable engagement. The theory underlying both the models that are JD-R and JDC model adopt that burnout among the employees would occur with having a low level of resources and a high level of job demands (Rothmann. and Joubert. 2007). Furthermore, the JDR model provides a comprehensive work for both the variables burnout and engagement. From previous studies, it has concluded that every organization has its own goals and factor which affect the organization. For further explanation of the model, the JDR model has divided into two main parts demand and resources. In contrast, demands have a positive relationship with burnout and a negative correlation with engagement, while funds have a positive relationship with engagement and an antagonistic relationship with burnout.

Further extension in the JD-R model, two main processes were introduced; the first is known as the health impairment process or energy process and the second is known as the motivational process. Job demands act as a health impairment process in which high demands meet with the reduction of physical and emotional resources and turn out into exhaustion (Demerouti, Bakker et al. 2001; Bakker. and Demerouti. 2007). Another part is job resources are motivational that motivate employees for development and learning (Bakker, Demerouti et al. 2003; Bakker and Demerouti 2007). Moreover, the model predicts four different interaction patterns. First, burnout occurs when resources are low and demands are high, second; employees have positive engagement when resources and demands both are high. Thirdly, when both resources and demands are low among employees, the incidence of disinterestedness occurs, and last but not least, boredom occurs when resources are high, or the demands are low (Bakker and Demerouti 2007). Thus, the JD-R model suggests that job demands have a positive relationship with exhaustion, and job resources have a negative association with work engagement (Demerouti, Bakker et al. 2001; Khan., Rasli et al. 2014).

From previous studies, in the health process of the JDR model, it has been concluded that job demands have a positive relationship with job burnout, which means that as the level of job demands increases, the level of job burnout will increase. On the other side, in the motivational process at the JDR model, it has been

observed that as the level of burnout increases, the level of job engagement is decreases and vice versa. Therefore, the current study formulated the hypotheses on the effect between job demands, job engagement, and organizational commitment.

Hypothesis 1. Job demands have a negative effect on job engagement.

Hypothesis 2. Job engagement has positive effects on organizational commitment.

Hypothesis 3. Job demands have a negative effect on organizational commitment.

Hypothesis 4. Job engagement mediates between job demands and organizational commitment.

III. RESEARCH METHODOLOGY

The research methodology has been used to answer the research questions with appropriate measures. In the social sciences, several other methods of research are used on the current problem condition and their situations. In simple words, the methodology of the research study depends on the nature of the questions. Further, there are three primary methods, qualitative, quantitative, and mixed-mode (Donald and Schindler 2010; Khan, Khan et al. 2017).

The research study has used a quantitative approach. We used a cross-sectional study design. We collected the data through an adapted questionnaire. We administered questionnaires among academicians in the public sector universities of Malakand division KP Pakistan.

Academicians of the universities of KP Pakistan were the participants of this research. We selected the University of Malakand, Shaheed Benazir Bhutto University Sheringal and the University of Swat for data collection. 653 academicians were contacted from these universities. The sampling has been done through simple random sampling on the basis of Krejcie and Morgan's suggestions (Krejcie and Morgan 1970; Hair 2006; Bryman and Bell 2011). 212 participants were selected through simple random sampling as every participant has equal chances to be selected. Out of the entire distributed questionnaire, 202 participants completed the questionnaires and 10 participants returned incomplete questionnaires. Hence, we did not consider incomplete questionnaires. The response rate of the questionnaire was satisfactory, which was sufficient for final data analysis.

3.1 Data Collections Tools

In the current research, engagement has been measured on the basis of the Utrecht Work Engagement Scale (UWES) (Schaufeli, Salanova et al. 2002), which contains the items of two core dimensions of job engagement. The validity of the UWES has been tested in previous studies among different countries (Schaufeli, Salanova et al. 2002; Hakanen, Bakker et al. 2006). Vigor will measure with six items and dedication had measured on five items. Cronbach's of job engagement are .80 and .86.

Job Demand has been measured based on two main dimensions that as workload and role demand. Furthermore, the workload has been measured based on twelve items, while Rizzo *et al.* (1970) and Khan et al, (2019), eight items will measure role demands.

Organizational commitment has been measured on the basis of three different dimensions that as normative, continuous and affective commitment. In the current research, the organization commitment has been measured on 18 items from Meyer *et al.* (1993), where the instrument was also used in different studies and reported their reliability is 0.78 (Khan et al. 2014)(Khan., Khan et al. 2017).

IV. RESULTS & DISCUSSIONS

In the current study, the data has been collected from the employees of the selected universities of Malakand division KP Pakistan. Table 1 shows the demographic details of the study. Moreover, the table shows that most of the respondents were married. In the same way, reported that high level as compared to single

53.8%, experience-wise, 31% were having an experience of more than ten years, 30%, 21.1%, and 18.3% were the experience of from 6-9, 1-5 and less than 1 years. Regarding the age in the current study, most of them are above 40, having a percentage of 47.4%.

Table 1. Response Rate		
Characteristics	Number of the Respondents (n)	Percentage
Marital Status		
Single	98	48.5
Married	104	51.5
Gender		
Male	143	71
Female	59	29
Experience		
More then 10	30	14.9
From 6 to 9	70	34.6
From 1 to 5	45	22.3
Less than 1 year	57	28.2
Age		
Above 40	30	14.9
30-39	70	34.6
21- 25	57	28.2
Less than 25	45	22.3

The primary purpose of the study was to investigate the relationship and effect of demands, engagement and commitment among faculty members of universities in Malakand division KP Pakistan.

From Table 2, it is clear that there is a negative relationship between demands with engagement and commitment while a positive relationship between engagement and commitment. On the same side, the effect was calculated on the basis of the regression analysis, as shown in Table 3. The dependent variable was job engagement and the independent variable was job demands. Furthermore, the table indicates that job demands have a negative relationship with job engagement among academicians.

Job demands with beta value 0.76 showed a positive value, whereas adjusted R square and $F=34.11$ at significant $P<0.01$. Furthermore, table 3 shows job engagement and commitment have a positive relationship. The beta values are 0.65 and the adjusted R square is 0.452 and $F=38.01$ at significant $P<0.01$.

*Significant at $p<0.01$

Table 2 Correlation analysis			
	Demand	engagement	Organizational commitment
Demands	1		
Engagement	-.786*	1	
Organizational commitment	-.987*	.789*	1

Table 3: Regression Analysis Results				
	Job Engagement		Organizational Commitment	
	Standardized β Coefficients	T-test scores	Standardized β Coefficients	T-test scores
Job demands	0.76	0.453*	0.65	1.324*
Adjusted R²	.452		.243	
R² Model	.123		.134	
F Model	34.11**		38.01**	

*Significant at $p < 0.05$; **Significant at $p < 0.01$

Table 4: Mediation Analysis of job engagement between job demands and Organizational Commitment

Step One Dependent Variable Organizational Commitment				
	β^b	Standard Error	t-value	P-value
Constant	5.123	0.314	24.3	.000
Job Demands	-0.453	0.754	-6.54	.000
R²	0.182			
Adjusted R²	0.179			
F	52.221*			
Step two Dependent Variable job Engagement				
	β^b	Standard Error	t-value	P-value
Constant	8.212	0.541	30.1	.000
Job Demands	-0.564	0.765	-5.65	.000
R²	0.192			
Adjusted R²	0.188			
F	49.453*			
Step three Dependent Variable Organizational Commitment				
	β^b	Standard Error	t-value	P-value
Constant	4.432	0.786	34.1	.000
Job engagement	0.786	0.657	-4.76	.000
R²	0.187			
Adjusted R²	0.180			
F	45.987*			
Step fourth Dependent Variable Organizational Commitment				
	β^b	Standard Error	t-value	P-value
Constant	5.453	0.114	31.0	.000
Job Demands	-0.341	0.321	-5.54	.000
Job engagement	0.478	0.389	32.0	.000
R²	0.154			
Adjusted R²	0.164			
F	45.431*			

*Significant at $p < 0.01$

Table 4 shows the mediating effect of job engagement on job demands and organizational commitment. The mediation has been analysed on the basis of Baron and Kenny's (1986) steps. In the first step, job demands and organizational commitment have been examined. The results indicated that there is a negative

relationship and Job demands to have 18.2 percent variance in organizational commitment significant ($F=52.221$, $p<.01$) and the standardized Beta value was high significance ($\beta = -0.453$, $p <.01$), which satisfied Baron and Kenny (1986) first condition.

Furthermore, the table shows that Job demands and job engagement were negative and significantly related, having a 19.2 percent variance in job engagement significant ($F = 49.453$, $p <.01$). Furthermore, the standardized Beta value has found high significance ($\beta = -0.564$, $p <.01$); therefore, it also satisfies the Baron and Kenny (1986) second step. The relationship between mediator job engagement and organizational commitment has found positive and describing 18.7 percent variance in organizational commitment ($F = 45.987$, $p <.01$), and the standardized Beta value has significant ($\beta = 0.786$, $p<.01$), which satisfied the third condition of Baron and Kenny (1986) of mediation.

At last, the fourth step of intervention, when job engagement has inducted in job demands and organizational commitment relationship, the standardized Beta value of job demands became smaller and significant such as from $\beta = -0.453$ ($p <.01$) to $\beta = -0.341$ ($p <.01$). Therefore, it satisfies the fourth step of Baron and Kenny (1986), thus describing the fact that job engagement has a full mediating effect on the association between job demands and organizational commitment. Therefore, the hypothesis is supported.

V. CONCLUSION

Through a vast understanding of the implication of the demands for engagement and commitment, the study presented an essential conceptual framework, which understands the interconnected workplace. The research study has empirically proved that there are adverse effects of demands on job engagement and organizational commitment (Aggarwal, Datta et al. 2007; Yusoff and Khan 2013; Khan., Yusoff et al. 2014). Burnout and engagement are independently correlated and harming each other. Burnout is the predicator of demands, while engagement is the predicator of resources (Schaufeli and Bakker, 2004). Furthermore, the researchers, Bakker et al. (2004) defined demands are related to the psychological, organizational, physical and social aspects of a job, which need afford to complete the task within the organization (Chen and Chen 2012). On the other side, studies mentioned that unsystematic work distribution of tasks exhausted the academicians and turned into ill health and decreases the organizational commitment (Demerouti, Bakker et al. 2001; Bakker, Demerouti et al. 2003; Khan, Rasli et al. 2020).

On the other side, the main objective of the research study determined that engagement mediates between demands and organizational commitment. As the level of demand increases, it decreases the level of engagement, which simply means that there is a negative relationship between job demands and engagement. Moreover, engagement and organizational commitment have a positive effect. Therefore, the study suggested that engagement plays a full mediation between the study variables.

Every study has certain limitations. The study is limited to the direct and indirect effects; therefore, we recommended reverse relationships and effects among the variables. Secondly, the study adopted the cross-sectional design and quantitative method; however longitudinal study can be conducted, which can give more useful results. Moreover, qualitative research may be conducted to evaluate some more dimensions of demands and engagements. The study is limited to job demands, engagement, and organizational commitment; some other variables like ill-health, performance, and depression may also be sort out.

REFERENCES

1. Aggarwal, U., S. Datta, et al. (2007). "The relationship between human resource contracts and employee engagement: Implications for managing talent." *IIMB Management Review* **19**(3): 313-325.
2. Aycan, Z., R. Kanungo, et al. (2000). "Impact of Culture on Human Resource Management Practices: A 10-Country Comparison." *Applied Psychology* **49**(1): 192-221.
3. Bakker, E. Demerouti, et al. (2003). "Job Demands and Job Resources as Predictors of Absence Duration and Frequency." *Journal of Vocational Behavior* **62**(2): 341-356.
4. Bakker, A. and E. Demerouti (2014). "Job demands-resources theory." *Wellbeing: A complete reference guide*: 37-64.

5. Bakker, A. B. and E. Demerouti (2007). "The Job Demands-Resources model: state of the art." Journal of Managerial Psychology **22**(3): 309-328.
6. Bakker, A. B. and E. Demerouti (2017). "Job demands–resources theory: taking stock and looking forward." Journal of Occupational Health Psychology **22**(3): 273.
7. Bakker. and E. Demerouti. (2007). "The Job Demands-Resources model: state of the art." Journal of Managerial Psychology **22**(3): 309-328.
8. Bakker., A. B., E. Demerouti, et al. (2004). "Using the job demands-resources model to predict burnout and performance." Human Resource Management **43**(1): 83-104.
9. Benders, J., H. Bleijerveld, et al. (2017). "Continuous improvement, burnout and job engagement: a study in a Dutch nursing department." The International journal of health planning and management **32**(4): 481-491.
10. Bryman, A. and E. Bell (2011). Business Research Methods 3e, Oxford university press.
11. Chen, C.-F. and S.-C. Chen (2012). "Burnout and Work Engagement Among Cabin Crew: Antecedents and Consequences." The International Journal of Aviation Psychology **22**(1): 41-58.
12. Demerouti, E., A. B. Bakker, et al. (2001). "Burnout and engagement at work as a function of demands and control." Scandinavian Journal of Work, Environment & Health: 279-286.
13. Demerouti, E., A. B. Bakker, et al. (2001). "The Job Demand - Resource Model of Burnout." Journal of Applied Psychology **86**(3): 499-512.
14. Demerouti, E., A. B. Bakker, et al. (2001). "The Job Demands–Resources Model of Burnout." Journal of Applied Psychology **86**(3): 499-512.
15. Donald, C. and P. Schindler (2010). Business Research Methods, McGraw-Hill Companies, Inc.
16. Farber, B. A. (1991). Crisis in education: Stress and burnout in the American teacher.
17. González-Romá, V., W. B. Schaufeli, et al. (2006). "Burnout and work engagement: Independent factors or opposite poles?" Journal of Vocational Behavior **68**(1): 165-174.
18. Hair, J. F. (2006). Multivariate Data Analysis with Readings, Pearson Prentice Hall.
19. Hakanen, J. J., A. B. Bakker, et al. (2006). "Burnout and work engagement among teachers." Journal of School Psychology **43**(6): 495-513.
20. Janssen, A. Bakker, et al. (2001). "A Test and Refinement of the Demand Control Support Model in the Construction Industry." International Journal of Stress Management **8**(4): 315-332.
21. Karasek, R. A. (1979). "Job Demands, Job Decision Latitude, and Mental Strain: Implications for Job Redesign." Administrative Science Quarterly **24**(2): 285-308.
22. Khan, F., Q. Khan, et al. (2018). "Impact of Job Stress and Social Support with Job Burnout among Universities Faculty Members." Paradigms **12**(2): 201-206.
23. Khan, F., Q. Khan, et al. (2017). "Moderating Effect of Social Support on the Relationship between Workload and Disengagement among the Academicians."
24. Khan, F., A. M. Rasli, et al. (2014). "Job Burnout and Professional Development among Universities Academicians." Science International Lahore **26**(4): 1693-1696.
25. Khan, F., A. M. Rasli, et al. (2019). "Interaction Effect of Social Support: The Effect of Workload on Job Burnout among Universities Academicians: Case of Pakistan." International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies **10**(13): 1.
26. Khan, F., A. M. Rasli, et al. (2020). "IS SOCIAL SUPPORT MODERATES BETWEEN WORKLOAD AND EMOTIONAL EXHAUSTION?" Gomal University Journal of Research **36**(2): 48-63.
27. Khan, F., R. M. Yusoff, et al. (2014). "Job Demands, Burnout and Resources in Teaching a Conceptual Review." World Applied Sciences Journal **30**(1): 20-28.
28. Khan., F., Q. Khan, et al. (2017). "Female Academicians are Burnout in Pakistan Universities?" Gomal University Journal of Research(Special Issue 1): 157-167.
29. Khan., F., Q. Khan, et al. (2017). "Job Rotation on Job Burnout, Organizational Commitment: A Quantitative Study on Medical Staffs Khyber Pakhtunkhwa Pakistan." Journal of Social Sciences and Huminity Studies **3**(4): 11-18.
30. Khan., F., A. M. Rasli, et al. (2014). "Job Rotation, Job Performance, Organizational Commitment: An Empirical Study On Bank Employees." Journal Of Management Info **3**(1): 33-46.
31. Khan., F., R. Yusoff, et al. (2014). "Job demands, burnout and resources in teaching a conceptual review." World Applied Sciences Journal **30**(1): 20-28.

32. Krejcie, R. V. and D. W. Morgan (1970). "Determining sample size for research activities." Educational and Psychological Measurement **30**: 607-610.
33. Meyer, J., N. Allen, et al. (1993). "Commitment to Organizations and Occupations: Extension and Test of a Three-Component Conceptualization." Journal of Applied Psychology **78**(4): 538-551.
34. Rizzo, House, et al. (1970). "Role Conflict and Ambiguity in Complex Organizations " Administrative Science Quarterly **15**(2): 150-163.
35. Rothmann, S. and J. H. M. Joubert. (2007). "Job demands, job resources, burnout and work engagement of managers at a platinum mine in the North West Province." South African Journal of Business Manage **38**(3): 49- 61.
36. Sargent, L. D. and D. J. Terry (1998). "The effects of work control and job demands on employee adjustment and work performance." Journal of Occupational and Organizational Psychology **71**(3): 219-236.
37. Schaufeli and A. B. Bakker. (2004). "Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study." Journal of Organizational Behavior **25**(3): 293-315.
38. Schaufeli and D. Enzmann (1998). The Burnout Companion to Study and Practice: A Critical Analysis, Taylor & Francis Group.
39. Schaufeli, W. B. and M. P. Leiter (1996). "Maslach burnout inventory-general survey." The Maslach burnout inventory-test manual: 19-26.
40. Schaufeli, W. B., M. Salanova, et al. (2002). "The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach." Journal of Happiness Studies **3**(1): 71-92.
41. Travers and Cooper (1996). Teachers under pressure: Stress in the teaching profession, London: Routledge.
42. Ventura, M., M. Salanova, et al. (2014). "Professional Self-Efficacy as a Predictor of Burnout and Engagement: The Role of Challenge and Hindrance Demands." The Journal of Psychology: null-null.
43. Winefield, C. Boyd, et al. (2008). Job Stress in University Staff: An Australian Research Study, Australian Academic Press.
44. Winefield, N. Gillespie, et al. (2003). "Occupational Stress in Australian University Staff: Results From a National Survey." International Journal of Stress Management **10**(1): 51-63.
45. Yusoff, R. M. and F. Khan (2013). "Stress and Burnout in the Higher Education Sector in Pakistan: A Systematic Review of Literature." Research Journal of Recent Sciences **2**(11): 90-98.