



## Job demands, Emotional Exhaustion and Ill Health among Academicians

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**Abstract:** *Job demands in the working environment contain motivation that requires energy and reduced health problems. The purpose of the current study has to examine the effect between demands, emotional exhaustion and ill health among academicians. The adapted questionnaires have been distributed among 215 public sector universities academicians. For the investigation, the Job Demand Resources (JD-R) model has been used. By using the regression model, the findings of the study concluded that demands like workload and role conflict have a significant effect on emotional exhaustion and ill health, which requires extra effort to accomplish the job as well as organizational goals. The current study will contribute to Job Demands Resources theory as well as recommendations for future research studies.*

**Key Words:** Job Demands, Emotional Exhaustion, Ill Health, OLDI Inventory, Academicians

### Introduction

At the start, the teaching profession was categorized among the “low-stress occupation” (Fisher, 1994), having less workload and having opportunities (Gillespie, Walsh, Winefield, Dua, & Stough, 2001); later on, teaching was considered a demanding profession among all professions. Teaching occupation and organizational characteristics increase stress and lead to burnout, especially core dimension emotional exhaustion.

From previous literature, it has been concluded that stress increases burnout, while it has also been examined that stress is not the main reason for burnout (Burisch, 2006). Stress is a chronic problem in the working environment among the employees (Doppia, Estryne-Be’har, Fry, Guetarni & Lieutaud, 2011).

According to Pines (2002) and Bakker, Schaufeli and Bosveld (2001), burnout is a necessary ingredient of the teaching profession. Different researchers like the United Kingdom USA, Australia, South Africa, and Canada (Burke. & Greenglass., 1993; Farber., 1984; Jackson. & Rothmann., 2004; Khan., Yusoff, & Khan, 2014; Kyriacou. & Pratt., 1985; Sarros. & Sarros., 1992) conducted in their research studies on the burnout in education actor in the developed countries.

According to Maslach *et al.*, (1993), Burnout is a psychological condition marked by emotional exhaustion, disengagement and reduction of personal achievement that can affect persons who work with others in some way (Khan, Rasli, Yasir, & Khan, 2019). Emotional exhaustion is characterized by a feeling of being emotionally overburdened and exhausted. The second dimension of burnout is depersonalization or disengagement, and it refers to a callous, unfavorable reaction to others who are usually the recipients of one's services. The third dimension of burnout is reduced personal accomplishment (Khan, Khan, Kanwal, & Bukhair, 2018). It is characterized that the employee who is negative evaluate his or her performance during the job (Engelbrecht, de Beer, & Schaufeli, 2020; Khan., Khan, & Naz, 2017).

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In the same way, educational institutions give valuable responsibilities to academicians who face several problems in an uncomfortable environment, where quality and quantity of performance among academicians are affected (Yusoff, Khan, Mubeen, & Azam, 2013). Academicians have responsibilities of teaching as well as research, and they will improve their academic career. Academicians improve intellectually and keep their innovation to meet the requirement for assessing career development (Khan., Rasli, Khan, Yasir, & Malik, 2014). Thus, academicians gradually feel stressed to complete their performance tasks and incapable of the stress full environment, and finally, they are exhausted from their personal and organizational job (Khan., Khan, Naz, & Rasli, 2016).

In the meanwhile, People believe that university professors have more job freedom, flexible hours, and a lighter workload. However, educational institutions have evolved in response to changing political and socioeconomic tendencies, and the teaching profession is today seen as difficult in all respects. (Khan. et al., 2017; Winefield et al., 2003). It has been observed in the last two decades that advantages like flexibility, freedom and working hours are no more exist. Therefore, countries like the United States of America, the United Kingdom, Australia and New Zealand concluded a major increase in burnout among the teaching profession (Fevre, Matheny, & Kolt, 2003; Khan., Rasli, et al., 2014).

In general, different types of job demands are role ambiguity, low performance, workload, job pressure, poor administrations, role demands, less autonomy, emotional demands, and social support boosts the level of burnout (Khan et al., 2019; Khan, Rasli, & Zahra, 2020; Lee & Ashforth, 1996). Burnout reduces the productivity of the employees and increases the turnover, absenteeism and affects the economic cost of the employers (Borritz et al., 2006; Medibank, 2008). In the current study, the researcher will try to investigate the relationship between job demands, especially workload and role conflict, a core dimension of burnout, emotional exhaustion and outcome ill-health among the university academician.

## Problem Statement

Different studies investigated the association between emotional exhaustion, demands and ill health in developed countries, but few studies determine this relationship in Pakistan. Pakistan is one of the developing countries under research (Aycan et al., 2000; Khan., Yusoff, et al., 2014). The study further investigates the relationship in a very affected area called Malakand KP Pakistan. The study will further contribute to the Job Demand resources (JD-R) theory. Moreover, the study will contribute to the organization, researcher and policymaker of higher education in Pakistan.

## Research Objectives

1. To determine the association between job demands with emotional exhaustion and ill health among academicians.
2. To examine the effect of job demands on emotional exhaustion and ill health among academicians.

## Literature Review

Job-related stress and burnout are at a higher level in different working sectors (Maslach, Schaufeli, & Leiter, 2001). From early studies, burnout has been conceptualized as a multi-component like a disengagement, emotional exhaustion, and reduced personal accomplishment construct. Earlier, burnout is characterized as a combination of three different syndromes called emotional exhaustion, disengagement and reduced personal accomplishment, which can occur among individuals that can occur in employees who work with others in any capacity (Khan., Rasli, Yusoff, & Ahmad, 2015; Maslach., Jackson., & Leiter., 1996).

Most of the researchers examined that burnout is characterized by exhaustion and negative approaches in the working environment (Demerouti., Mostert, & Bakker, 2010; Khan, Khan, Malik, & Qureshi, 2017). Many of the studies determined empirically that emotional exhaustion and cynicism are the core dimensions of burnout. Emotional exhaustion is characterized by feelings of exhaustion and a considerable decrease in emotional resources

(Khan. et al., 2015; Maslach et al., 2001). Cynicism is developed as the result of exhaustion, whereas personal accomplishment also develops independently (Khan., Yusoff et al., 2014; Leiter., 1993). Reduced personal accomplishment is one of the weakest dimensions of burnout in words of relationships with another burnout dimension (Lee. & Ashforth., 1996), but in the same way, it reflects personality properties rather than the burnout component (Cordes & Dougherty, 1993; Shirom, 1989). It is also examined that Personal accomplishment has a weak relationship with the other two core dimensions of burnout (Lee. & Ashforth., 1996; Schaufeli, 2003). Furthermore, personal

accomplishment has been dropped from the study that emotional exhaustion leads to disengagement, but the personal accomplishment is developed independently (Leiter., 1993; Moczyłowska, 2016; Mukherjee, Tennant, & Beresford, 2020).

On the other side to the development of burnout literature, Demerouti, Bakker, Vardakou and Kantas (2003) introduces a new inventory for the measurement burnout called Oldenburg burnout inventory (OLBI), which consists of the two main dimensions rather than reduced personal accomplishment. The inventory has been used to measure burnout in a different profession and consider a valid instrument to find the effect of dimensions of burnout (W. Lee, Migliaccio, Lin, & Seto, 2020; Yusoff & Khan, 2013).

Job demands attain importance in the working environment. Job demands are a series of complex factors, which are multifold; therefore, no specific definition could be assigned to it. Authors have defined it in different ways, depending on the context and situation where it has been defined. According to Sargent and Terry (1998), The amount of work required of an employee, the level to which he or she is required to work under time constraints, and the extent to which the person is expected to meet several job expectations are all classified as job demands. Job demands are those that correspond to physical, psychological, organizational, and social dimensions in which an employee must exert effort in order to fulfil personal and organizational objectives (Chen & Chen, 2012; Hakanen, Ropponen, De Witte, & Schaufeli, 2019; Schaufeli & Bakker., 2004). Cooper and Marshall (1976) and Beehr and Newman (1978) reported six different working demands such as organizational role, professional development, both organizational structure and environment, colleagues relationship during the job and extra-institutional sources of stress (Cooper & Marshall, 1976; Montgomery, 2017). In another study, the authors reported different demands that are job demands, role expectations, and organizational external and internal environment (Beehr & Newman, 1978). From previous existing literature job, stressors are directly related to Burnout (Hakanen, Bakker, & Schaufeli, 2006; Yusoff & Khan, 2013).

Job Demands like workload and role conflict relates to physical, psychological, organizational and social aspects of a job that requires effort by the employees (Bakker, Demerouti., & Verbeke., 2004; Chen & Chen, 2012; Khan, Khan, & Naz, 2016; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007). Here the researcher has been determined job demands from the mean of both of their components like workload and role conflict. The researcher defines workload as the number of teaching hours, which are assigned or corresponding in other actions taking time in working of institutions, which is directly or indirectly to the professional responsibilities, duties, and interests. Role conflict defines as the mismatch between job and job descriptions, expectations and incompatibility of the job, where performance has been measured. Workload includes less decision power, numbers of the student in the class, competing tasks, salary problem (Van der Westhuizen, Wissing, & Hillebrand, 1992). Peeters *et al.* (2005) recommended that job demands may prompt negative outcomes on the off chance that they require extra exertion to accomplish work objectives. Stressors are now a universally recognized component of life. Currently, it's become a problem for employees everywhere during their job and leads them to de-motivation and low performance (Gorji, 2011). It mostly affects performance and productivity, but its overall consequence affects both individuals and organizations.

Job demands have been measured in different professions based on various dimensions like lack of autonomy, workload, emotional demands, promotions, role conflict and ambiguity, family conflict, administrative duties, scholarships and organizational role stressors (Byrne, 1994; Wilkerson & Bellini, 2006). The existing review of the literature indicates negative burnout effects on academicians' well-being, organization performance, productivity and turnover rate (Bakker *et al.*, 2004; Kim & Stoner, 2008; Maslach *et al.*, 2001; Nissly, Barak, & Levin, 2005). Dwyer and Ganster (1991) introduced concepts of psychological and physical demands. Jackson *et al.* (1993) separated job demands into three main types, that is, time and method control, monitoring demands, production responsibilities and problem-solving demands. Later on Wall *et al.* (1995) introduced the concept of mental demands, which are specifically related to one's psychological state of mind.

Burnout relates to the individual experience of an employee related to the specific working environment. Different types of individual characteristics are observed like demographics, personality, attitude (Maslach *et al.*, 2001). Some other organizational factor is also examined, which influence burnout. To determine the relationship between job demands and emotional exhaustion, the researcher has been using the theoretical model of burnout Job Demands Resources (JD-R). The basic application of the JD-R model is that every profession has its specific job characteristics. In detail, the model consists of two main items job demands and job resources. Job demands define as the psychological, physical, social aspects of the job, which need physical and psychological effort. Job resources define as that those physical, psychological, organizational features of the job, which help in completing, aims and motivates personal growth and development.

Job resources may play a motivational or extrinsic motivational role (Schaufeli & Bakker., 2004). The second assumption of the JD-R models is that they suggest two types of processes. Firstly, when demands are high, then the employee must be exhausted and may lead to burnout and health problems (Lee & Ashforth, 1996; Perumalswami et al., 2020). Secondly, due to a lack of employment resources, actual goal achievement is unlikely, resulting in failure and frustration. However, the researcher based on these applications that having too many jobs demands and few job resources will tend to be exhausted, which changes into ill-health problems. Nowadays, in the public or private sector, institutions are at great competition and are followed by both external and internal environments. The employees of the universities are considered to be the largest group of professionals, which plays a leading role in the cost and quality in healthcare, and those employees have the potential to answer the main problems.

### Conceptual Framework

Based on the literature, the following conceptual framework for the current study has been designed where job demands, especially workload and role conflict, are the independent variables, and emotional exhaustion will be the dependent variable in the current study.

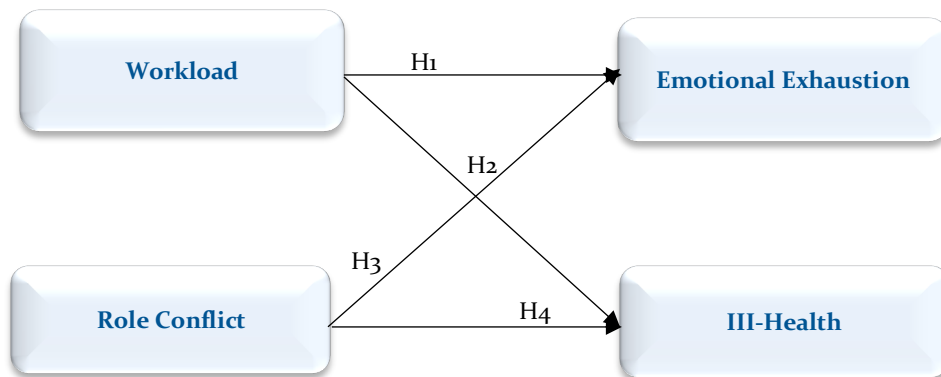


Figure 1: Conceptual Framework

### Research Methodology

In the study, a cross-sectional design has been used, where data were collected one time. Statistical Package for Social Sciences (SPSS) has been using to address the finding associated with cross-sectional design (Byrne, 2001; Byrne., 2013).

To answer the research questions, the data were collected from public sector universities academician. The population of the study academician was 495. According to the Krejcie and Morgan (1970) table, the sample size will be 215. Therefore, the questionnaire was distributed through personal visits and email.

### Instruments for Measurement

Job demand was measured by means of two dimensions like workload and role conflict. The workload was measured on a Dutch version (de Jonge, Maureen, Dormann, Le Blanc, & Houtman, 2000) of Karasek's (1985) and Khan et al., (2019). The scale refers to quantitative, demanding aspects of the job having five items 'My job requires working very hard.' Items were scored on five-Likert scales, ranging from 1 to 5 (Strongly disagree- strongly agree). Moreover, the second job demands dimension is role conflict, which was measured by four points of Rizzo et al., (1970) whose reliability was 0.70 has been observed.

In the same way, burnout was investigated with the help of the Oldenburg burnout inventory (OLBI). It consists of sixteen negative and positive items, of which eight items are related to emotional exhaustion. All the terms were scored by using a five standard Likert scale was used from strongly disagree to strongly agree. The validity of the instrument was tested by most of the researchers (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Demerouti., et al., 2010) emotional exhaustion 0.82 and disengagement was 0.83.

Sub-scales of the An Organizational Stress Screening Evaluation Tool (ASSET) was measured Ill-Health (Cartwright & Cooper, 2002). The scale consists of eight items of physical health. The reliability coefficient of the scales was 0.70 in the study.

### Research Findings

Descriptive analysis was used to examine the general statistical description of the variables. In the present study, different multivariate analysis was examined to check out the fitness of the data which make sure that the assumption was not violated. Therefore, to tests multivariate are linearity, multicollinearity, normality, outlier and homoscedasticity in the data. Normality is defined by Gravetter and Wallnau (2006) and reported that the term "normal" refers to asymmetrical, bell-shaped curve with the highest frequency in the centre and decreasing frequency towards the extremes. Therefore, from the results of the study, there are no normality and linearity problems in the data. The multicollinearity concept was tested with the help of SPSS "Collinearity diagnostics" the tolerance and Variance Inflation Factor (VIF). Pallant (2010) examined that tolerance is inverse of VIF, and also, he reported that if tolerance values are less than 0.10, it means that multicollinearity will be present. Similarly, the results show that there are no multicollinearity issues. For more details, the results have been shown in table 1. While homoscedasticity is defined as that (p.85), the score for one continuous variable that is essentially the same for all values of another continuous variable is referred to as variety (Khan et al., 2017; Tabachnick & Fidell, 2007). The outlier is defined by Hair et al. (2010) examined as on a set of variables; this analysis compares the position of each observation to the center of all observations.

**Table 1.** Tolerance and VIF

Variables	Tolerance	VIF
Workload	0.265	2.345
Role conflict	0.432	2.227
Emotional exhaustion	0.202	2.230
Physical health	0.320	2.546

Table 2 shows that the means of the independent and dependent variables are between 2.01 and 3.50. Cronbach’s alpha of each variable has been calculated which is almost greater than 0.70, wherein in social science the reliability value is in the acceptable range (Nunnally & Bernstein, 1994). Furthermore, Table 2 shows the standard deviation and the correlation analysis among the study variables. Job demands, especially workload and role conflict, are significantly correlated to emotional exhaustion and physical ill-health.

**Table 2.** Descriptive statistics, Reliability and Correlation of the Study Variables

S.No	Items	Mean	SD	1	2	3	4
1.	Workload	2.55	0.48	0.72			
2.	Role conflict	2.43	0.60	0.56*	0.80		
3.	Emotional exhaustion	2.01	1.40	0.66*	0.53*	0.70	
4.	Physical ill health	3.50	0.43	0.45*	0.55*	0.58*	0.71

SD= Standard Deviation, \*Significant at  $P < 0.05$ .

Table 3 shows the findings of the analysis; there is a positive relationship between workload, role conflict, emotional tiredness, and ill-health among university academicians.

**Table 3.** Regression Analysis

	Emotional exhaustion		Ill Health	
	Standardized $\beta$ Coefficients	t-test Score	Standardized $\beta$ Coefficients	t-test Score
Workload	0.270	1.543*	0.210	1.890*
Role Conflict	0.245	2.123**	0.190	1.765**
Adjusted R <sup>2</sup>	0.241		0.456	
R <sup>2</sup> Model	0.222		0.345	

	Emotional exhaustion		Ill Health	
	Standardized $\beta$ Coefficients	t-test Score	Standardized $\beta$ Coefficients	t-test Score
F Model	48.123**		34.001**	

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

In the analysis, the workload and role conflict entered with emotional exhaustion and physical ill-health. The results show that emotional exhaustion shows 24.1% variance at  $p < 0.01$  with  $F = 48.123$ , while physical ill-health shows the 45.6% variance at  $P < 0.01$  having  $F = 34$  by the two demands dimensions. Therefore, the hypotheses have been supported.

### Discussion on Findings

The current study focuses on the antecedents of exhaustion towards ill-health. The results of the finding confirm that only emotional exhaustion is not enough for better ill-health. Other important factors like workload and role conflict plays an important role in the continuation of physical ill-health among academicians.

Furthermore, according to study results, demands have significant effects on core dimension emotional exhaustion and physical ill-health. The result of the current study is also parallel to previous studies (Bakker., Demerouti., & Euwema., 2005; Greenglass, Burke, & Fiksenbaum, 2001; Khan, Rasli, Yusoff, & Ahmad, 2015; Khan, Yusoff, & Khan, 2014; Khan., Rasli, et al., 2014). It shows that as the level of demand increase the level of exhaustion is increase and vice versa, while on the other side, that exhaustion level increases the level of physical ill-health problem. The results of the study are parallel to the previous studies (Khan., et al., 2017; W. B. Schaufeli & Bakker, 2004). Therefore, all the proposed hypotheses were supported by the collected data from university academicians.

### Conclusion, Limitation and Future Recommendation

The present study concluded that the job demands affect the burnout level and that burnout in turn change to ill health problems. This study will help academicians to understand their behavior according to the level of demands, exhaustion and upcoming health problems. This study will also help university administrations and policymakers of the higher educational institutions to improve the resources for their employee to reduce the health problem because employees are the important assets of the organizations. As from previous studies, it is recommended that as job resources increase, the level of job demands decreases and also, the level of burnout decreases (Khan et al., 2014; Xanthopoulou et al., 2007).

Education plays an important role in the economy of the country; therefore the researcher recommended that the study should be carried out in the primary and secondary levels of education to reduce the exhaustion level and ill-health problems among the academicians.

The study has the following limitations. The JD-R model in this research has many other factors which need consideration. Future research may identify other factors, job resources like job control, support, feedback, etc., which reduced the exhaustion and ill health problems among the academicians.

The study was conducted by collecting cross-sectional data. Problems of the academicians are dynamic from time to time. Therefore, the researcher recommended that future research may carry out a longitudinal study to compare and evaluate academicians' problems at different times to reach more accurate results about demands and exhaustion of the academicians. Further, the research model can be tested in different cultures and sectors to verify the distinct types of relationships that existed in the model. In last, the study was conducted on the direct relationships among the variables; therefore, the researcher recommended the researcher for the indirect and causal relationship among the academicians.

## Reference

- Aycan, Z., Kanungo, R., Mendonca, M., Yu, K., Deller, J., Stahl, G., & Kurshid, A. (2000). Impact of Culture on Human Resource Management Practices: A 10-Country Comparison. *Applied Psychology, 49*(1), 192-221. doi: 10.1111/1464-0597.00010
- Bakker, A. B., Schaufeli, W. B., Sixma, H. J., & Bosveld, W. (2001). Burnout contagion among general practitioners. *Journal of Social and Clinical Psychology, 20*(1), 82.
- Bakker, Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management, 43*(1), 83-104. doi: 10.1002/hrm.20004
- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job Resources Buffer the Impact of Job Demands on Burnout. *Journal of Occupational Health Psychology, 10*(2), 170-180.
- Beehr, & Newman, J. E. (1978). Job Stress, Employee Health, and Organizational Effectiveness: A Facet Analysis, Model, and Literature Review. *Personnel Psychology, 31*(4), 665-699. doi: 10.1111/j.1744-6570.1978.tb02118.x
- Borritz, M., Rugulies, R., Bjorner, J. B., Villadsen, E., Mikkelsen, O. A., & Kristensen, T. S. (2006). Burnout among employees in human service work: design and baseline findings of the PUMA study. *Scandinavian Journal of Public Health, 34*(1), 49-58.
- Burisch, M. (2006). Das Burnout-Syndrom: *Springer*.
- Burke, & Greenglass, E. (1993). Work stress, role conflict, social support and psychological burnout among teachers. *Psychological Reports, 73*(371-380), 371.
- Byrne. (1994). Burnout: Testing for the Validity, Replication, and Invariance of Causal Structure Across Elementary, Intermediate, and Secondary Teachers. *American Educational Research Journal, 31*(3), 645-673. doi: 10.3102/00028312031003645
- Byrne. (2001). Structural equation modeling with AMOS, basic concepts, applications, and programming (Vol. null).
- Byrne, B. M. (2013). Structural equation modeling with AMOS: Basic concepts, applications, and programming: *Routledge*.
- Cartwright, S., & Cooper, C. (2002). ASSET: An organizational stress screening tool-The management guide. *Manchester, UK: Robertson/Cooper Ltd*.
- Chen, C.-F., & Chen, S.-C. (2012). Burnout and Work Engagement Among Cabin Crew: Antecedents and Consequences. [doi: 10.1080/10508414.2012.635125]. *The International Journal of Aviation Psychology, 22*(1), 41-58. doi: 10.1080/10508414.2012.635125
- Cooper, C. L., & Marshall, J. (1976). Occupational sources of stress: a review of the literature relating to coronary heart disease and mental ill health. *Journal of Occupational Psychology, 49*(1), 11-28. doi: 10.1111/j.2044-8325.1976.tb00325.x
- Cordes, C. L., & Dougherty, T. W. (1993). A Review and an Integration of Research on Job Burnout. *The Academy of Management Review, 18*(4), 621-656. doi: 10.2307/258593
- de Jonge, J., Maureen, D., Dormann, C., Le Blanc, P. M., & Houtman, I. L. D. (2000). The Demand-Control Model: Specific Demands, Specific Control, and Well-Defined Groups. *International Journal of Stress Management, 7*(4), 269-287. doi: 10.1023/a:1009541929536
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job Demand - Resource Model of Burnout. *Journal of Applied Psychology, 86*(3), 499-512.
- Demerouti, E., Bakker, A. B., Vardakou, I., & Kantas, A. (2003). The convergent validity of two burnout instruments: A multitrait-multimethod analysis. *European Journal of Psychological Assessment, 19*, 12-23.
- Demerouti, E., Mostert, K., & Bakker, A. B. (2010). Burnout and work engagement: A thorough investigation of the independency of both constructs. *Journal occupational health Psychology, 15*(3), 209-222. doi: 10.1037/a0019408
- Dwyer, D. J., & Ganster, D. C. (1991). The effects of job demands and control on employee attendance and satisfaction. *Journal of Organizational Behavior, 12*(7), 595-608. doi: 10.1002/job.4030120704
- Engelbrecht, G. J., de Beer, L. T., & Schaufeli, W. B. (2020). The relationships between work intensity, workaholism, burnout, and self-reported musculoskeletal complaints. *Human Factors and Ergonomics in Manufacturing & Service Industries, 30*(1), 59-70.
- Farber, B. A. (1984). Teacher Burnout: Assumptions, myths and issues. *Teacher College Record, 8*, 321-338.
- Fevre, M. L., Matheny, J., & Kolt, G. S. (2003). Eustress, Distress and interpretation in occupational stress. *Journal of Managerial Psychology, 18*(7), 726-744. doi: 10.1108/02683940310502412

- Fisher. (1994). *Stress in academic life: The mental assembly line*. Guildford, England: Society for Research into Higher Education; Maidenhead, BRK, England: *Open University Press*.
- Gillespie, N. A., Walsh, M., Winefield, A. H., Dua, J., & Stough, C. (2001). Occupational stress in universities: Staff perceptions of the causes, consequences and moderators of stress. [doi: 10.1080/02678370117944]. *Work & Stress*, 15(1), 53-72. doi: 10.1080/02678370117944
- Gorji, M. (2011). The Effect of Job Burnout Dimension on Employees' Performance. *International Journal of Social Science and Humanity*, 1(4), 4.
- Gravetter, F., & Wallnau, L. (2006). *Statistics for the behavioral sciences: Cengage Learning*.
- Greenglass, E. R., Burke, R. J., & Fiksenbaum, L. (2001). Workload and burnout in nurses. *Journal of Community & Applied Social Psychology*, 11(3), 211-215.
- Hair, J. F., & Anderson, R. E. (2010). *Multivariate data analysis (7th ed.)*: Prentice Hall Higher Education.
- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43(6), 495-513.
- Hakanen, J. J., Ropponen, A., De Witte, H., & Schaufeli, W. B. (2019). Testing Demands and Resources as Determinants of Vitality among Different Employment Contract Groups. A Study in 30 European Countries. *International Journal of Environmental Research and Public Health*, 16(24), 4951.
- Jackson, P., Wall, T., & Martin, J. (1993). New measures of job control, cognitive demand, and production responsibility. *Journal of Applied Psychology*, 78(5), 753-762.
- Jackson., L., & Rothmann., S. (2004). An adapted model of burnout for teachers in South Africa.
- Karasek, R. A. (1985). *Job content instrument and user's guide, revision 1.1 March 1985 (Vol. null)*.
- Khan, F., Khan, Q., & Naz, A. (2016). FEMALE ACADEMICIANS ARE BURNOUT IN PAKISTAN UNIVERSITIES? *Gomal University Journal of Research*, 32(1), 157-167.
- Khan, F., Khan, Q., Kanwal, A., & Bukhair, N. (2018). Impact of Job Stress and Social Support with Job Burnout among Universities Faculty Members. *Paradigms*, 12(2), 201-206.
- Khan, F., Khan, Q., Malik, M. S., & Qureshi, M. I. (2017). Moderating Effect of Social Support on the Relationship between Workload and Disengagement among the Academicians.
- Khan, F., Rasli, A. M., Yasir, M., & Khan, Q. (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.
- Khan, F., Rasli, A. M., Yusoff, R. M., & Ahmad, A. (2015). Do Demographic Make a Difference to Job Burnout Among University Academicians? *International Journal of Economics and Financial Issues*, 5.
- Khan, F., Rasli, A. M., & Zahra, T. (2020). IS SOCIAL SUPPORT MODERATES BETWEEN WORKLOAD AND EMOTIONAL EXHAUSTION? *Gomal University Journal of Research*, 36(2), 48-63.
- Khan, F., Yusoff, R. M., & Khan, A. (2014). Job Demands, Burnout and Resources in Teaching a Conceptual Review. *World Applied Sciences Journal*, 30(1), 20-28.
- Khan., F., Khan, Q., & Naz, A. (2017). Female Academicians are Burnout in Pakistan Universities? *Gomal University Journal of Research*(Special Issue 1), 157-167.
- Khan., F., Khan, Q., Naz, A., & Rasli, A. M. (2016). Effect of Disengagement on Organizational Commitment among Universities Academicians: An empirical study. *PUTAJ-Humanities and social sciences*, 23(2), 113-125.
- Khan., F., Rasli, A. M., Khan, S., Yasir, M., & Malik, M. F. (2014). Job burnout and professional development among universities academicians. *Science International Lahore*, 26(4), 1693-1696.
- Khan., F., Rasli, A. M., Yusoff, R. M., & Ahmad, A. (2015). Do Demographic Make a Difference to Job Burnout Among University Academicians? *International Journal of Economics and Financial Issues*, 5.
- Khan., F., Yusoff, R., & Khan, A. (2014). Job demands, burnout and resources in teaching a conceptual review. *World Applied Sciences Journal*, 30(1), 20-28.
- Kim, H., & Stoner, M. (2008). Burnout and Turnover Intention Among Social Workers: Effects of Role Stress, Job Autonomy and Social Support. [doi: 10.1080/03643100801922357]. *Administration in Social Work*, 32(3), 5-25. doi: 10.1080/03643100801922357
- Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30(3), 607-610. doi: 10.1177/001316447003000308
- Kyriacou, C., & Pratt., J. (1985). Teacher Stress and Psychoneurotic symptoms. *British Journal of Educational Psychology*, 55, 61-64.
- Lee, & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81(2), 123-133.

- Lee, W., Migliaccio, G. C., Lin, K.-Y., & Seto, E. Y. (2020). Workforce development: understanding task-level job demands-resources, burnout, and performance in unskilled construction workers. *Safety Science*, 123, 104577.
- Lee, R., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81(2), 123-133.
- Leiter, M. P. (1993). Burnout as a developmental process: consideration of models. . In S. W.B., C. Maslach & T. e. Marek (Eds.), *Professional Burnout Recent Developments in Theory and Research* (pp. 237-250). Washington, DC: Taylor & Francis.
- Maslach, C., Schaufeli, W. B., & Marek, T. (1993). Professional burnout: Recent developments in theory and research (Vol. null).
- Maslach, Schaufeli, W. B., & Leiter, M. P. (2001). Job Burnout. *Annual Review of Psychology*, 52, 397-422. doi: 10.1146/annurev.psych.52.1.397
- Maslach, Jackson, S. E., & Leiter, M. P. (1996). Maslach Burnout Inventory Manual (Third ed.): Palo Alto, CA: Consulting Psychologists Press.
- Medibank. (2008). The Cost of Workplace Stress in Australia Retrieved 15th Feb, 2012, from <http://www.medibank.com.au/client/documents/pdfs/the-cost-of-workplace-stress.pdf>
- Moczyłowska, J. (2016). Organisational reasons of job burnout. *Ekonomia i Zarządzanie*, 8(2), 7-12.
- Montgomery, C. (2017). Development and Testing of a Theoretical-Empirical Model of Educator Stress, Coping and Burnout *Educator Stress* (pp. 181-195): Springer.
- Mukherjee, S., Tennant, A., & Beresford, B. (2020). Measuring Burnout in Pediatric Oncology Staff: Should We Be Using the Maslach Burnout Inventory? *Journal of Pediatric Oncology Nursing*, 37(1), 55-64.
- Nissly, J. A., Barak, M. E. M., & Levin, A. (2005). Stress, Social Support, and Workers' Intentions to Leave Their Jobs in Public Child Welfare. [doi: 10.1300/J147v29n01\_06]. *Administration in Social Work*, 29(1), 79-100. doi: 10.1300/J147v29n01\_06
- Nunnally, J., & Bernstein, I. (1994). *Psychometric Theory* (3rd ed.): New York: McGraw-Hill.
- Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS*: McGraw-Hill International.
- Peeters, M. A. G., & Rutte, C. G. (2005). Time Management Behavior as a Moderator for the Job Demand-Control Interaction. [Article]. *Journal of Occupational Health Psychology*, 10(1), 64-75. doi: 10.1037/1076-8998.10.1.64
- Perumalswami, C. R., Griffith, K. A., Jones, R. D., Stewart, A., Ubel, P. A., & Jagsi, R. (2020). Patterns of work-related burnout in physician-scientists receiving career development awards from the National Institutes of Health. *JAMA internal medicine*, 180(1), 150-153.
- Pines, A. M. (2002). Teacher Burnout: A psychodynamic existential perspective. [doi: 10.1080/13540600220127331]. *Teachers and Teaching*, 8(2), 121-140. doi: 10.1080/13540600220127331
- Rizzo, H. & Lirtzman. (1970). Role Conflict and Ambiguity in Complex Organizations *Administrative Science Quarterly*, 15(2), 150-163.
- Sargent, L. D., & Terry, D. J. (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. doi: 10.1111/j.2044-8325.1998.tb00674.x
- Sarros, J. C., & Sarros, A. M. (1992). Social support and teacher burnout. *Journal of Educational Administration*, 30(1), 55-61.
- Schaufeli, & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior*, 25(3), 293-315. doi: 10.1002/job.248
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior*, 25(3), 293-315. doi: 10.1002/job.248
- Schaufeli. (2003). Past performance and future perspectives of burnout research. *South African Journal of Psychology*, 29, 1-15.
- Shirom. (1989). Burnout in work organizations. In Cooper & I. Robertson. (Eds.), *International review of industrial and organizational psychology* (pp. 25-48). New York: Wiley.
- Tabachnick, B. G., & Fidell, L. S. (2007). Using multivariate statistics: International edition (5th ed.): Pearson Education, Limited.

- Van der Westhuizen, P., Wissing, M., & Hillebrand, I. (1992). Werksbevrediging by die onderwysers. *Tydskrif vir Geesteswetenskappe*, 32, 40-51.
- Wall, T. D., Jackson, P. R., & Mullarkey, S. (1995). Further evidence on some new measures of job control, cognitive demand and production responsibility. *Journal of Organizational Behavior*, 16(5), 431-455. doi: 10.1002/job.4030160505
- Wilkerson, K., & Bellini, J. (2006). Intrapersonal and Organizational Factors Associated With Burnout Among School Counselors. *Journal of Counseling & Development*, 84(4), 440-450. doi: 10.1002/j.1556-6678.2006.tb00428.x
- Winefield, G. N., Stough, C., Dua, J., Hapuarachchi, J., & Boyd, C. (2003). Occupational Stress in Australian University Staff: Results From a National Survey. *International Journal of Stress Management*, 10(1), 51-63.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The Role of Personal Resources in the Job Demands-Resources Model. *International Journal of Stress Management*, 14(2), 121-141.
- Xanthopoulou, D., Bakker, A. B., Dollard, M. F., Demerouti, E., Schaufeli, W. B., Taris, T. W., & Schreurs, P. J. G. (2007). When do job demands particularly predict burnout?: The moderating role of job resources. *Journal of Managerial Psychology*, 22(8), 766 - 786.
- Yusoff, R. M., & Khan, F. (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.
- Yusoff, R. M., Khan, F., Mubeen, A., & Azam, K. (2013). A Study about Factors Influencing the University Performance. *Jurnal Teknologi*, 64(2).