



**RESEARCH PAPER**

**The Impact of Work Demands and Work Group Support on Emotional Exhaustion among Medical Doctors: A Moderating Analysis**

Dr. Umi Lela<sup>1</sup> Dr. Muhammad Latif<sup>2</sup> Dr. Mubashar Hanif<sup>3</sup>

1. Head of Department, Humanities and social sciences, GIFT University, Gujranwala, Punjab, Pakistan
2. Assistant Professor, Incharge Department of Education, GC Women University Sialkot, Punjab, Pakistan
3. Deputy Director Research, Association for Academic Quality (AFAQ), Islamabad, Pakistan

**PAPER INFO**

**Received:**  
February 08, 2021

**Accepted:**  
March 15, 2021

**Online:**  
March 30, 2021

**Keywords:**  
Emotional Exhaustion, Medical Doctors, Work Demands, Work Group Support

**Corresponding Author**

muhammad.latif@gcwus.edu.pk

**ABSTRACT**

The study intended to find out predictive relationship between work demands and emotional exhaustion among medical professionals with buffering function of work group support. Cross sectional research method was used during this research. Based on convenient sampling technique 226 medical doctors were approached from Islamabad and Rawalpindi. Their responses were recorded on self-report measures of study variables. Amos was used to analyze the model fit in relation to research plan. The results of the study show that there is a significant directional relationship between work demands and emotional exhaustion. Medical doctors are facing numerous work demands which are leading them towards emotional exhaustion which is unavoidable because of nature of their work, whereas high level of work group support may lessen the level of emotional exhaustion caused by their work demands. It is recommended that their work place resources must be improved to facilitate them. Their long duty shifts should be adjusted as per standard working hours and number of on duty doctor should be adequate to meet the needs of indoor patients and emergency conditions. Limitations experienced by researcher include the sampling technique which was selected convenient so the results cannot be generalized to all doctors in Pakistan.

**Introduction**

All over the world, the rapid growth of services has underlined the “dark” aspects of service jobs which notably involve the interactions with the job fatigue

and occupational stress. Existing research tradition has revealed the fact that medical doctors have to face emotional demand regarding their work. It provokes Job dissatisfaction (Karatepe, 2011), turnover intentions (Zhang & Feng, 2011), payback behaviors (Azhar, Azhar, & Azhar, 2012), and withdrawal behaviors (Williams, 2001). The qualitative & quantitative workload has been found to be a dominant tiredness, task related stressor; lacking feedback, job clarity etc (Dahlin, Joneborg, & Runeson, 2005).

Doctors have to face high emotional demands on their job which is a proven fact all over the world, but at Pakistan these emotional stipulates heightened their effects in presence of long working hours, required specialized work, low incentives, multiple involvements, work-family spill over and job insecurity the situation becomes worsen when work resources are insufficient even below then the requirement level (Dahlin, 2005).

The present study is designed to find out the impact of work demands; frequency of the tasks to be performed, number of the clients to be dealt on daily basis, level of client satisfaction, subjective nature of services, number of daily working hours, work spillover and work family interference on medical doctors' emotional exhaustion while studying the effect of work group level support as moderating variable.

### **Literature review**

Doctors, involved in the high work demand to fulfill their job place demand such as long working hours, specialization requirements in their specific field, multiple involvement at work place service, work-family spill over and job insecurity mentioned activities on daily basis, consequently they are emotionally exhausted (Malik, Zaheer, Khan, & Ahmed, 2010). One of the buffering variables is Work group level support, for example trained paramedical staff, skilled technicians, supportive administration and compatible colleagues. These are leading determents which have influential impact upon nature of job related demands and mental health related outcomes of medical doctors (Baba, Jamal, & Tourigny, 1998; Fox, Dwyer, & Ganster, 1993).

Advanced countries have reported a lot of literature as considering job stress and tired performance among doctors, but gap has been found while considering Pakistani perspective as a developing country. Therefore, present study is designed whilst taking account of the medical profession of Pakistan.

The theoretical model that attempts to link two independent research practices including stress research tradition and the motivation research tradition is termed as "Job Demands-Resources (JD-R) model". This model states "job demands as starters of health weakening and job resources as starters of motivation towards work. The interaction between job demands and resources is also well explained by

the model along with experience of tiredness and aspects of work support” (Schaufeli & Bakker, 2004).

Emotional Exhaustion is the consequence of exhaustion. In a long run this leads to energy loss and devastation of emotional and physical potential (Williams, Jackson, & Anderson, 1997). The feelings where one feels loss of energy and being emotionally and physically shattered are directly related to emotional exhaustion (Leiter, Harvie, & Frizzell, 1998).

Emotional exhaustion as a result of work demand is quite obvious. Recent literature has been reported for emotional exhaustion caused by emotional task level demand among doctors and teachers (Visser, Smets, Oort, & de Haes, 2003).

Interpersonal support is actually the interpersonal relationship among colleagues. “Stress and the feeling of being ignored and isolated are also the consequence of poor communication and lack of team work support among professionals (Visser, 2003)”. From the above statement it can be concluded that lack of work group support can act as a stress enhancer (Frese, 1999).

Work group support including colleagues and support staff as like paramedical staff, technicians, hospital administration and colleagues is considered to play a vital role in doctors’ performance to sort out the solutions of the problems linked with their own stress and patient traumatic state.

Theoretical framework of the present study is founded by the conversation of resource theory and job demand and resource theory. JD-R model based on aforementioned theories integrates; work demands, work group support to gauge level of emotional exhaustion among medical doctors.

## **Material and Methods**

### **Research design**

The cross sectional study was sampled with a convenient sampling technique. National institute of Psychology was requested to give the ethical approval to conduct this study. Hospital administrations were also requested to give their kind consent of approval to collect data from their doctors. Out of 480 questionnaires only 287 were received completely filled. Deliberately both male and female participants were approached.

### **Data Collection/Measures**

Emotional Exhaustion: Emotional exhaustion was measured by using nine items from Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1997). Responses score may vary from 1 to 7 depending upon frequency of state; Never, Once, Rarely,

sometimes, often, Usually, Always. As per current study scale's alpha reliability is .86.

Work demands: Eight items sub-scale from the job demands and resource indigenous scale were used to measure construct. Responses may be given with 1 to 4 depending upon agreement with statement; not at all, to some extent, to great extent, absolutely. The scale's alpha reliability of scale has been found .80.

Work Group support: Sixteen items sub-scale from formerly reported scale were used. Scale ranging from 1 = Never, 2 = Sometimes, 3 = Most of the time, 4 = Always. The scale's alpha reliability in this study is .72.

It took almost three months to collect data. Data was analyzed afterwards through SPSS21 and Amos by using different types of statistical tests. Comparison of research with the previous literature was conducted to test the exceptionality of model.

### Results and Discussion

Most of the respondents were married (69.7 %) males (74.3%) and working at private hospital (80.6 %) as well as public hospital (19.4%). More than half of the doctors (53.1 %) were having contract from 1 to 5 years. Maximum of the respondents belonged to two groups of ages such as 25 - 30 years (22.3 %) and 36 - 40 years (20.1 %). Average level of emotional exhaustion (Mean=5.5), Average experience of work demands (Mean=3) and average level of perceived support (Mean=2.5)

The researchers used Amos 21.0, to test the proposed model.

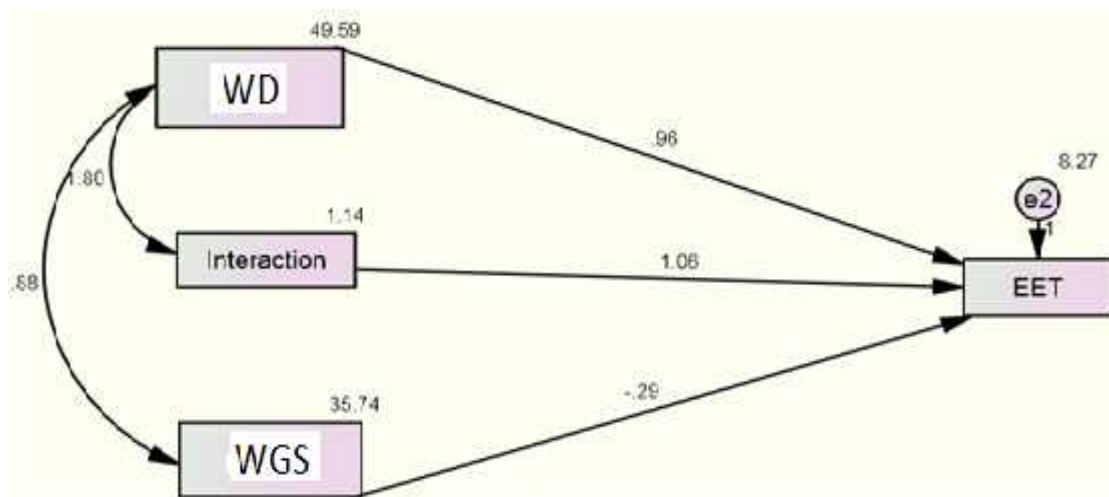


Figure 1: Moderating effects of work group support

**Table 1**  
**Fit indices of the Model Work group support as Moderator**

Models	Chi Square	df	Fit Indices			
			CFI	NFI	IFI	RMSEA
M1	1.669	1	0.997	0.992	0.999	.021

Note.  $\chi^2$  =Chi-square; df=degree of freedom; RMSEA=root mean square error of approximation; GFI=goodness of fit index; CFI= comparative fit index; NFI = normed fit index; TLI =tucker-lewis index. Errors within the factors were let correlated.

\*\*P <.001

The value of chi-square (1.669) is non-significant ( $p < 0.05$ ). The researchers used two measures such as Comparative Fit Index (CFI) and Goodness of Fit Index (GFI) to assess fit of the model. Values of CFI (0.997) and NFI (0.992) are close to 1 which shows the goodness of the model fit (Singh-Manoux, Clarke, & Marmot, 2002).

## Discussion

AMOS 21 version was used to assess the associations between variables and results were discussed in light of the reported literature. Our first objective was achieved after the statistical tests that there is a significant positive relationship between work demands and emotional exhaustion among doctors. Work demands in our study have been defined as work load, qualitative work load, emotional demands and long working shifts. Work demand and emotional exhaustion have been also been reported in different studies (Greenhaus & Beutell, 1985; Maslach, Schaufeli, & Leiter, 2001).

The second objective of our study is also positively supported by the statistical tests; it implies that work group level support has a significant negative impact on emotional exhaustion which also got support from research literature including multiple samples with both cross sectional and longitudinal studies (Maslach, 2001).

Formulated third objective was about cushioning effect of work group support between work demands and emotional exhaustion among doctors and has been positively proven after the application statistical tests; past researches are also confirming it (Goussinsky & Livne, 2016). It is evident from results that doctors are facing high work related demands which are leading them towards emotional exhaustion. On the other side facilitating role colleagues, paramedical staff, technician especially at Operation Theater may help them to lessen their hazardous effects of emotional exhaustion.

## **Conclusion**

The main purpose of the designed study was to test the relationship and impact of work demands; frequency of the tasks to be performed, number of the clients to be dealt on daily basis, level of client satisfaction, subjective nature of services, number of daily working hours, work spillover and work family interference on medical doctors' emotional exhaustion and examining the effect of work group level support as moderating variable within the framework of "job demand and resource model" among the medical doctors.

Results show that there is a significant positive relationship between work demands and emotional exhaustion among doctors. Furthermore it has been depicted that among doctors emotional exhaustion got significantly decreased with increasing level of work group support. So It is highly recommended to increase work group support at all level as seniors, colleagues even support staff to create a healthy work place environment to ensure the emotional health of medical doctors.

## **Recommendations**

One of the recognized workplace hazards is physician burnout. It is a serious threat to the professional and social lives of physicians. Hence, it should be handled carefully, and effective measures should be taken at the individual as well as professional levels. The physicians need to adopt a healthy lifestyle; furthermore they should avoid practicing at multiple clinics or hospitals just to get benefits monetarily. They should also try to balance their work-life and their family life to avoid being burned out. On institutional level, the hospital should provide a proper working environment to the physicians, provide them with the latest equipment, balance the ratio of physicians and patients, and provide the physicians with the best conducive working environment. Job security, compatible job compensations, proper funds, and other resources for doctors should be improved by policy-makers in the healthcare sector. These steps can prove aiding, healthy, and motivating environment for the doctors.

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