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Mediating Role of Burnout Between the Job Demands-Control Model and Psychological Well-being in Healthcare Professionals in Pakistan

Peran Mediasi Kelelahan antara Model *Job Demands-Control* dan Kesejahteraan Psikologis pada Tenaga Profesional Kesehatan di Pakistan

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ABSTRACT

Integrating the Job Demand-Control model (JDC) with the Conservation of Resource Theory, this study tested the JDC model for the direct and indirect effects of job demands (JD) and control (JC) on the psychological well-being (PWB) of healthcare professionals working in hospitals in Karachi, along with the mediating effects of burnout. The study employed Structural Equation Modelling using SMART PLS for data analysis of a sample of 316 healthcare providers from different hospitals in Karachi. The results supported the direct effects of JD and JC on PWB and the mediating effects of burnout. The findings of the study add further empirical evidence to current literature on job stress. The results indicated that healthcare professionals in Pakistan are confronted with a demanding job that causes burnout and ultimately becomes a reason for their decreased PWB. The study also presented various practical implications for different stakeholders. From a sustainability standpoint, this study indicated the need to balance job demands and job control in order to design psychologically healthy jobs.

ABSTRAK

Dengan mengintegrasikan model *Job Demands-Control* (JDC) pada *Conservation of Resource Theory*, penelitian ini menguji model JDC akan efek langsung dan tidak langsung dari tuntutan pekerjaan (JD, *job demands*) dan kontrol (JC, *job control*) pada kesejahteraan psikologis (PWB, *psychological well-being*) dari tenaga kesehatan yang bekerja di rumah sakit di Karachi, bersama dengan efek mediasi dari kelelahan (*burnout*). Penelitian ini menggunakan *Structural Equation Modeling* dengan SMART PLS untuk menganalisis data sampel dari 316 orang tenaga kesehatan dari rumah sakit yang berbeda di Karachi. Hasil penelitian menunjukkan adanya efek langsung dari JD dan JC pada PWB dan efek mediasi dari kelelahan. Temuan penelitian menambah bukti empiris lebih lanjut untuk literatur saat ini tentang stres kerja. Hasil penelitian menunjukkan bahwa tenaga kesehatan di Pakistan dihadapkan dengan pekerjaan yang menuntut sehingga menyebabkan kelelahan dan akhirnya menjadi alasan penurunan PWB mereka. Studi ini juga menyajikan berbagai implikasi praktis bagi para pemangku kepentingan yang berbeda. Dari sudut pandang keberlanjutan, penelitian ini menunjukkan kebutuhan untuk menyeimbangkan tuntutan pekerjaan dan kontrol pekerjaan untuk merancang pekerjaan yang sehat secara psikologis.

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1. Introduction

Psychological well-being (PWB) has a vital role in keeping people happy, healthy, and motivated in all aspects of life (WHO, 2014). Although workplaces have neglected employees' mental health for quite a long time (Harnois & Gabriel, 2000), the United Nations set Goal 3 of the 17 Sustainable Development Goals (SDGs) to address the physical and mental well-being of people of all ages (WHO, 2015). To achieve SDGs, employers

must create stress-free work environments, which may reduce burnout in their employees (Bliese et al., 2017) enhanced, thus improving PWB. A plethora of research has examined the associations between burnout and psychological well-being and its impact in various occupations on several health-related issues, such as lethargy (Adil & Baig, 2018), lack of enthusiasm (Salanova et al., 2014), anxiety (Golonka et al., 2019), depression (Golonka et al., 2019), and cardiac arrest (Padyab et al., 2016). In the service sector, job burnout is

the most severe and notable undesirable outcome related to employee well-being (Desrumaux, et al., 2015; Adil & Baig, 2018). Further, a rise in the number of service occupations under current economic conditions may have created a psychological imbalance among employees, due to challenging job demands (Adil & Baig, 2018; Bakker A. B. et al., 2003; Ha'usser et al., 2010). Burnout reflects lethargy and emotional dissonance among employees, due to potentially demanding service sector jobs (Adil & Baig, 2018; Viotti & Converso, 2016; Smoktunowicz, et al., 2015). Therefore, it is time for employers to realize the significance of a healthy psychosocial environment where employees can thrive while performing (Adil & Baig, 2018; Zadow et al., 2017).

Within the service sector, the problem of burnout and reduced PWB has been frequently tested on accountants (Pozo-Antúnez et al., 2018), police officers (Smoktunowicz et al., 2015) and nurses (Viotti & Converso, 2016; Pisanti, et al., 2016). However, the effects of highly demanding jobs on the PWB of employees in the healthcare profession still need attention (Viotti & Converso, 2016). Particularly in Pakistan, healthcare professionals serving in hospitals in various capacities, from doctors to technicians, appear to be a neglected population. A recent study by Adil and Baig (2018) is notable for highlighting the negative effects of job demands on PWB; however, that study focused on the pharmaceutical industry. Working in shifts, providing for patients and their needs day in day out, and constant expectations of better performance are some challenges which may threaten the mental and physical health of healthcare professionals. Though employers can compensate for demanding roles by improving the psychosocial workplace environment in terms of control over various job aspects, managerial support, feedback and financial rewards (Smoktunowicz, et al., 2015; Brough & Biggs, 2013), the responsibilities associated with healthcare professionals' roles appear to still be too demanding. As a result, this workforce often feels lethargic, less engaged in their roles, and ultimately intends to leave their jobs (Bakker & Costa, 2014; Bakker & Demerouti, 2017; Bliese et al., 2017; Desrumaux, et al., 2015).

Thus, such a challenging environment seems threatening to the PWB of the employees in healthcare industry. Hence, it seems obligatory to analyze whether the demands and control of these jobs deteriorate or enhance PWB of healthcare providers in Pakistan. To the best of our knowledge, there seems a gap in literature offering empirical support for the JDC effects on BO and PWB among healthcare employees. This gap serves as the reason for this article to extend the JDC literature by providing empirical evidence to the jobs of healthcare providers which can be a useful insight both for the employers and policy makers to consider while designing

their jobs and offering resources to promote employee's health and well-being in the unique cultural setting of Pakistan and its healthcare industry. The findings from this research are therefore expected to draw the attention of job analysts in the healthcare industry to meticulously incorporate psycho-social factors into job design for a mentally stable and healthy workforce regardless of rigorous performance requirements.

Research has identified several models for psychosocial environments, such as the Job Characteristics Model (Hackman & Oldham, 1976), Vitamin Model (Jonge & Schaufeli, 1998), Job Demands-Resources Model (Bakker A. B., et al., 2003), and Job Demand-Control Model (JDC) (Dai et al., 2008). Among these, the JDC model holds the most prominent place in the literature, due to its application in various disciplines (Adil & Baig, 2018; Brough & Biggs, 2013; Bakker A. B. et al., 2003). The JDC model has been tested for direct and indirect psychological outcomes in several previous studies (Ha'usser et al., 2010; Viotti & Converso, 2016; Hu et al., 2017). However, despite wide usage of the JDC model for job designs and workplace environments, there seems to be a paucity of evidence in terms of direct and indirect effects of job demands on PWB in the healthcare profession (Viotti & Converso, 2016). Similarly, the literature also presents limited empirical support for the direct and indirect effects of job control (Konze et al., 2017). Regarding burnout, which is a significant undesirable effect of JDC, there seems to be a lack of research identifying the mediating role of its different components, which could be a useful addition to JDC literature. Thus, the limited empirical support for strain and buffer effects of job demand (JD) and job control (JC) on PWB served as the basic premise of the current research. The aim of this study was two-fold. Primarily, it tested the JDC model for the direct effects of its components on PWB and burnout. In addition to direct effects, the current study also measured the mediating effect of burnout in the JD-PWB relationship and the moderating effect of JC in the JD-BO relationship, in the healthcare profession.

The theoretical framework of this study was founded on the JDC model and the Conservation of Resource (COR) theory. While the JDC model elaborates the significance of job demands and control in affecting mental stress at work, COR theory reiterates the moderating effects of social and personal resources in coping with the aftermath of demanding jobs (Smoktunowicz, et al., 2015; Xanthopoulou et al., 2007). According to the JDC model, psychological job demands serve as major stressors, which ultimately influence employees' PWB (Ha'usser et al., 2010; Konze et al., 2017). Control over various aspects of a job through decision latitude counterbalance the negative consequences of job demands (Smoktunowicz, et al., 2015; Jonge et al., 2010). Notably, the model stresses the matching principle

that explains the interaction effects of job demands and control (Konze et al., 2017; Brough & Biggs, 2013). In this regard, mental workload (job demand) can be damaging if appropriate decision latitude (job control) is not provided (Jonge et al., 2010).

According to the JDC model, the relationship between JDC and PWB is inseparable as the model comprehensively elaborates, through strain hypothesis, how job demands reduce the mental well-being of employees in high strain jobs. Contrary to it, the buffer hypothesis of the same model explains the role of job control to reduce this damaging effect in order to restore the mental well-being of employees at work. This particular relationship of the JDC and PWB of employees is, therefore, the essence of this model which has been tested in various organizational and cultural settings. A meta-analysis of JDC and PWB literature given by van der Doef and Maes (1999), from 1979 to 1997, and then further extended by Ha'usser et al. (2010) from 1998 to 2007 analyzing 83 studies on the same subject, highlighted the relationship between the two variables in a detailed manner. These analyses confirmed the PWB to be a valid outcome of the JDC model, along with burnout as a considerably emerging outcome of demanding jobs. Hence, this notion reiterates the need to test the two outcomes of the JDC model, both directly and indirectly, in a variety of context in order to demonstrate the validity of the model (Ha'usser et al., 2010). The 48 studies, according to the analysis of Ha'usser et al. (2010), confirmed the effects of PWB through using Karasek's model of JDC. However, these findings indicated the effect of job demands and control on PWB to be supported strongly in some cases and partially in few. This is an important consideration which emphasizes the current need to further examine the effect of JD and JC on PWB in order to get further clarity about the relationship.

This study, from the viewpoint of COR theory, also focused on employee burnout. COR theory explains how humans behave to avoid stress when their personal and social resources are threatened (Hobfoll et al., 1990). According to this theory, resources are defined as entities which either have a primary value or serve as a means to achieve something which is of primary interest to people (Hobfoll et al., 1990; Xanthopoulou et al., 2007). The current study takes into consideration the basic premise of COR theory that people make efforts to gain, enhance, and secure their resources, and may experience stress if their resources are endangered (Xanthopoulou et al., 2009; Hobfoll, 2011).

JDC – Burnout & Psychological Wellbeing

After the increasing emergence of service occupations, service jobs have switched from physical to emotional demands. The JDC model has been acclaimed widely due to the inclusion of these emotional demands (Konze et

al., 2017). The current study therefore develops hypotheses based on the very nature of the demanding and controlling aspects of jobs which probably would influence the PWB of employees both directly or indirectly via affecting burnout in a unique cultural setting of Pakistan and its healthcare industry.

A study by Györkös et al. (2012) highlighted the effects of high job demands and low job control on increasing work-related stress, and emphasized the fact that psychologically demanding jobs are more likely to cause depression and other mental health disorders (Györkös et al., 2012). Another study by Schütte et al. (2014) investigated the effects of psychosocial working conditions on PWB among employees in 34 European countries. Job demands were major psychosocial factors included in the study, and were found to be significantly associated with reduced PWB. Regarding the role of job control, Viotti and Converso (2016) conducted a study in which both the direct and indirect roles of skill description—a dimension of job control—were measured for various psychological outcomes. The results brought to light the fact that high skill description plays a significant role in reducing emotional exhaustion and increasing affective well-being (Viotti & Converso, 2016). Based on the above literature, we hypothesized the following:

Hypothesis 1: Job demands significantly enhance burnout.

Hypothesis 2: Job control significantly reduces burnout.

Hypothesis 3: Job demands significantly reduce PWB.

Hypothesis 4: Job control significantly enhances PWB.

Mediating Role of Burnout between JDC and Psychological Well-being

The indirect effects of JD and JC have also been frequently tested (Brough & Biggs, 2013; Bakker et al., 2004). For example, Fox et al. (2001) measured the mediating role of negative emotions in the relationship between JD and undesirable work behaviors; however, the mediating role of work-related factors still requires further investigation (Konze, et al., 2017). Among such work-related factors, job burnout is the most relevant to consider (Konze, et al., 2017). In this regard, Smoktunowicz and colleagues (2015) highlighted the mediating effects of job-related burnout in the relationship between JD and counterproductive work behaviors. Similarly, Hu et al. (2017) also indicated that highly demanding jobs lead to burnout among employees, which consequently threatens their PWB. A study by Konze et al. (2017) highlighted how an imbalance between job demands and control results in impaired PWB for employees. Additionally, a recent study by Adil and Baig (2018) also offered empirical evidence for the correlations among JD, burnout, and employee PWB. Based on our review of the literature, we hypothesized the following:

Hypothesis 5: Burnout significantly mediates the relationship between JD and PWB.

Hypothesis 6: Burnout significantly mediates the relationship between JC and PWB.

Moderating Role of Job Control in the Relationship between JD and BO

Apart from the direct effects, the moderating role of JC can also be explained through COR theory and the JDC model. Additionally, empirical evidence has been presented to examine the buffer effects of JC on the JD-burnout relationship. Hu et al. (2017) contributed by testing the moderating effects of JC on JD and burnout among Chinese nurses and police officers, in a longitudinal study. Konze and colleagues (2017) also highlighted the moderating effects of JC. Similarly, a longitudinal study by Jonge et al. (2010) measured the moderating effect of JC on employees' PWB, which was shown to be reduced due to JD among healthcare professionals. This previous study identified how, due to low job control, the negative impact of job demands can be higher, and vice-versa (Jonge et al., 2010). Pozo-Antúnez et al. (2018) reported insignificant results for JC as a moderator between JD and accountants' occupational health. Therefore, we hypothesize the moderating role of JC as follows:

Hypothesis 7: Job control significantly moderates the relationship between JD and BO.

2. Methods

Participants and Procedure

Since the current study targeted the effects of job demands on healthcare professionals' PWB in the hospitals of Karachi, a sample of 400 doctors, nurses, and surgeons, employed in hospitals (N=400) was selected (Rea & Parker, 1992) in a cross-sectional design. Due to the unavailability of the population frame, the sample was drawn using convenience sampling (Sekaran, 2016). Data were collected through self-report questionnaires, by approaching the human resource departments of hospitals. Upon approval of participation from the hospitals, the target population was approached, and the purpose of the research and value of their feedback were explained. Respondents were ensured of their anonymity and were given paper questionnaires to complete. Out of 400, a total of 321 questionnaires were returned, from which five were discarded due to missing values; therefore, the final response rate was 79% (N=316). Out of 316, 121 were males and 195 were the female respondents. 42% of the respondents were nurses, 27% physicians whereas 31% were surgeons, therefore comprising a diversified sample of healthcare providers. Data in the current study were analyzed using SPSS version 21 and Partial Least Squares Path Modeling (Smart PLS 3.2.8 version 2017).

Measures

All the measures employed in the current research were multi-item scales adopted from literature. The Job Content Questionnaire (JCQ) developed by Karasek was employed to measure job demands and job control (Karasek et al., 1998). A modified scale with four items to measure job control and four items to measure job demands was focused in the current study (Karasek et al., 1998; Sale & Kerr, 2002). Two items from job control and three items from job demands were reverse coded.

The Copenhagen Burnout Inventory was used to measure three dimensions of burnout. The instrument comprises three items for each dimension: personal burnout, work-related burnout, and client-related burnout (Kristensen et al., 2005).

PWB was measured through Ryff's scale for PWB (Ryff & Keyes, 1995). Although the original scale includes 42 questions, an abridged scale was adopted, with six items rated on a five-point Likert scale (Ryff & Keyes, 1995).

3. Results

Measurement Model

This study was analysed using partial least square statistical software, Smart PLS, which involves description of measurement model and structural model. Figure 1 shows measurement model. The measurement model's algorithm analysis is represented in the form of Item loadings, AVE and CR, measuring the convergent validity and internal consistency of the constructs, which are shown in Table 1. Construct validity confirms that constructs that are theoretically established to be relevant are actually found out to be related (Hair et al., 2017; Chan, 2003; Schumacker & Lomax, 2010; Henseler et al., 2016; Henseler et al., 2015). Items loading and average variance extracted (AVE) values are important in this regard (Hair et al., 2010). Table 1 reflects the loading values above 0.8 which according to Chan (2003) is a strong indicator. Composite reliability (CR) is an appropriate measure for internal consistency for the scale. The loadings of indicators must be highest on their respective constructs. Table 1 indicates the CR values to be more than 0.7 which is an acceptable limit (Fornell & Larcker, 1981). For AVE, the suggested acceptable limit is 0.5 which can also be seen in the same Table.

The construct validity of the outer model is further confirmed through discriminant validity, presented in Table 2, which assures the absence of inter-correlations among the constructs. The square root of AVE is assessed with correlations among the constructs (Fornell & Larcker, 1981; Chan, 2003) which should be more than 0.50 (Hair et al., 2017; Hair et al., 2010).

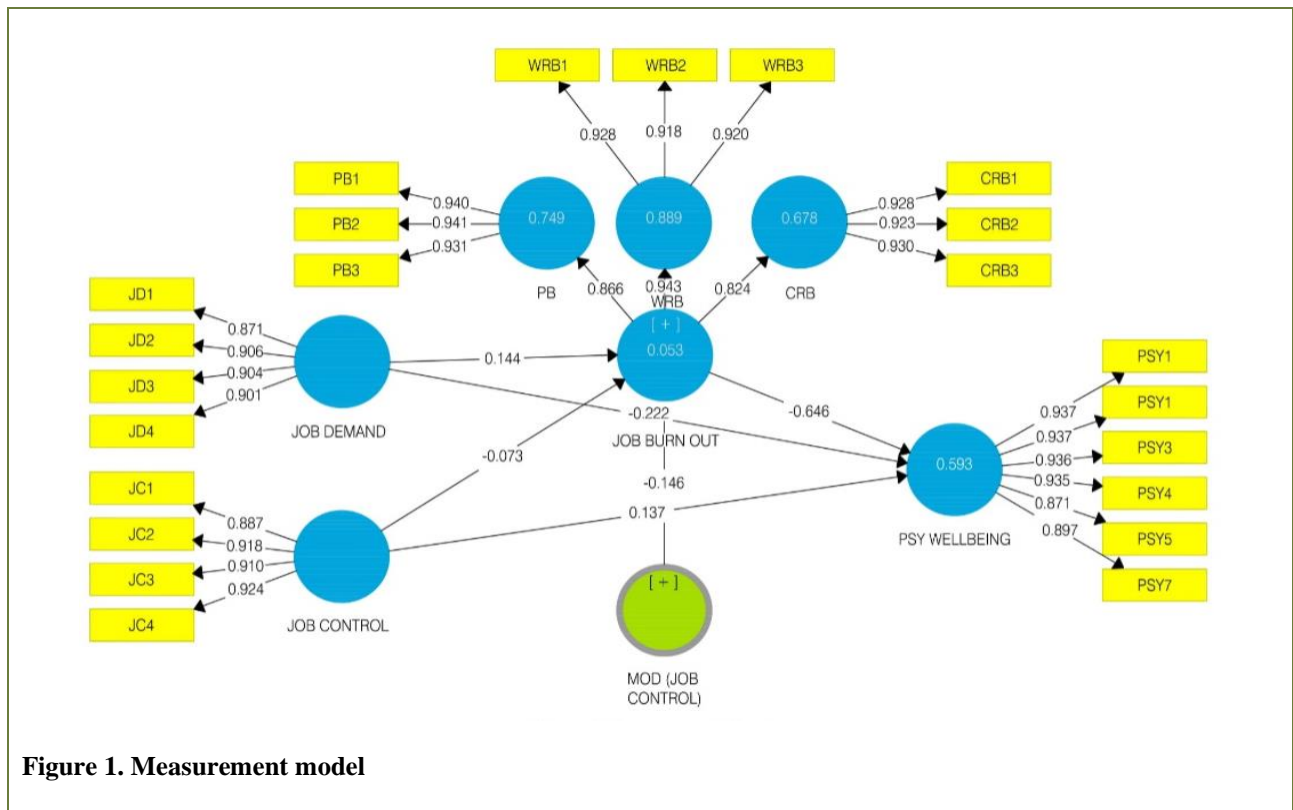


Figure 1. Measurement model

Table 1. Measurement model

Variable	Item	Loading	AVE	CR
Client related burnout	CRB1	0.928	0.859	0.948
	CRB2	0.923		
	CRB3	0.930		
Personal burnout	PB1	0.940	0.878	0.956
	PB2	0.941		
	PB3	0.931		
Work related burnout	WRB1	0.928	0.850	0.945
	WRB2	0.918		
	WRB3	0.920		
Job Control	JC1	0.887	0.665	0.947
	JC2	0.918		
	JC3	0.910		
	JC4	0.924		
Job Demand	JD1	0.871	0.802	0.942
	JD2	0.906		
	JD3	0.904		
	JD4	0.901		
Psychological Well Being	PWB1	0.937	0.593	0.942
	PWB2	0.937		
	PWB3	0.936		
	PWB4	0.935		
	PWB5	0.871		
	PWB6	0.897		

Note. AVE= Average Variance Extracted, CR= Composite Reliability. CRB= Client Related Burnout, PB= Personal Burnout, WRB= Work related Burnout, JC=Job Control, JD= Job Demands, PWB= Psychological Well being

Table 2. Discriminant validity

Variables	CRB	JBO	JC	JD	Mod(JC)	PB	PWB	WRB
CRB	0.927							
JBO	0.824	0.816						
JC	-0.072	-0.134	0.910					
JD	0.129	0.166	-0.619	0.896				
Mod (JC)	-0.043	-0.121	-0.182	0.150	0.680			
PB	0.494	0.865	-0.120	0.116	-0.168	0.937		
PWB	-0.602	-0.701	0.360	-0.413	0.114	-0.590	0.919	
WRB	0.698	0.943	-0.156	0.190	-0.104	0.771	-0.654	0.922

Note. CRB= Client Related Burnout, JBO= Job Burnout, JC= Job Control, JD= Job Demands, Mod (JC)= Job Control as a Moderator, PB= Personal Burnout, PWB= Psychological Well-being, WRB= Work-related Burnout

Table 3. The result of R² and adjusted R² values

Endogenous Variables	R ²	Adjusted R ²
Job Burnout	0.053	0.044
PWB	0.593	0.589

Note. PWB= Psychological Well-being

Assessment of the Structural Model (Inner Model)

Once all the measures for outer model are attained, it is now required to evaluate the structural model. This is carried out by evaluating path coefficients, effect size and coefficient of determination (Falk & Miller, 1992; Hair et al., 2014). In PLS, the nonparametric resampling procedures like bootstrapping are used to determine whether the path coefficients are statistically significant or not (Hair et al., 2014). To assess the inner model, it is prescribed to assess the R² and adjusted R² values which are indicated in Table 3. This table highlights how much are the dependent or endogenous variables are explained by the exogenous variables i.e. job demands and control. Where PWB is well explained by JD and JC with 58.9% effects, on the other hand, JBO is failed to be explained by them with a minimal effect of 4.4% (Cohen, 1988; Chin et al., 2010).

Hypothesis Testing for Direct Effects

PLS algorithm is initially run with all the variables to determine the values of direct relationships as per the hypotheses 1 to 4. Table 4 shows the direct relationships among all the constructs of the study. The results for direct effects show that JD and PWB have significant negative relationship, thus supporting the H1 which

states that job demands reduces PWB ($\beta = -0.22, p < 0.001$). It also approves the hypothesized effect between JC and PWB to be significantly positive ($\beta = 0.137, p < 0.001$). Thus, H2 is also accepted. Another hypothesized effect between JD and BO is also found to be positively significant ($\beta = 0.144, p < 0.05$), thus accepting H3. However, the hypothesized relationship between JC and BO is found to be insignificant ($\beta = -0.073, p = 0.266$). Therefore, H4 is rejected (Hair et al., 2010).

Hypothesis Testing for Indirect Effects

Established through literature, this study hypothesizes the mediated effect of burnout in relationship between job demands, job control and PWB. It can be seen in Table 5 that the mediated effect is present only between job demands and PWB ($\beta = -0.093, p < 0.005$). Whereas the mediated effect between job control and PWB is found to be insignificant ($\beta = 0.047, p = 0.267$). Thus Hypothesis 5 is substantiated while Hypothesis 6 is rejected. This study also hypothesizes the moderated relationship of job control between job demands and burnout. The results reveal an insignificant effect of JC as a moderator between JD and PWB ($\beta = -0.146, p = 0.331$). Therefore, Hypothesis 7 is rejected.

Table 4. Path analysis and hypothesis testing for direct effects

Hypothesis No.	Hypothesized Effect	Path Coefficient	Standard Deviation	T-Statistics	P Values	Decision
1	JD-PWB	-0.222	0.047	4.688	0.000	Accepted
2	JC-PWB	0.137	0.041	3.334	0.001	Accepted
3	JD-BO	0.144	0.065	2.207	0.027	Accepted
4	JC-BO	-0.073	0.066	1.113	0.266	Rejected

Note. JD-PWB= Relationship between Job Demands and Psychological Well-being, JC-PWB= Relationship between Job Control and Psychological Well-being, JD-BO= Relationship between Job Demands and Burnout, JC-BO= Relationship between Job Control and Burnout

Table 5. Path analysis and hypothesis testing for mediating effects

Hypothesis No.	Hypothesized Effect	Path Coefficient	Standard Deviation	T-Statistics	P Values	Decision
5	JD-JBO-PWB	-0.093	0.043	2.159	0.031	Accepted
6	JC-JBO-PWB	0.047	0.043	1.109	0.267	Rejected

Note. JD-JBO-PWB= Relationship between Job Demands and Psychological Well-being with Job Burnout as a Mediator, JC-JBO-PWB= Relationship between Job Control and Psychological Well-being with Job Burnout as a Mediator

4. Discussion

This research extends current job stress literature by testing the JDC model for its effects on the PWB of healthcare professionals, through the mediating and moderating roles of burnout and job control, respectively. The major contribution of our research comes with the unique integration of JDC model with COR theory, in order to test the direct and indirect effects of the JDC model's job components on PWB. Furthermore, testing the mediated and moderated effects simultaneously makes adds to the novelty of this study.

Regarding the direct effects of the JDC model, including both JD and JC, the results indicated a significant negative effect of JD on PWB and a significant positive effect of JC on PWB. Despite differences in cultural context, similar results have been reported by previous research (Desrumaux, et al., 2015; Viotti & Converso, 2016; Adil & Baig, 2018) in which the two components of the JDC model were found significantly correlated with PWB. These results are crucially important to understand the demanding nature of healthcare jobs where employees' PWB is threatened. The demanding aspects, ranging from conflicting roles to investing more time and energy into jobs, are taking a high toll on employees' PWB which is an alarming indicator. Thus the well-being of healthcare employees, who are themselves responsible to restore well-being of patients, is endangered. However, the positive role of job control on PWB is an indicator of the fact that the damaging effects of JD can be curtailed using appropriate amount of freedom given to employees while performing their

jobs. These results offer an insightful direction to the employers, HR practitioners and policy makers to give due consideration to the psycho-social factors as resources which are important to sustain employees' PWB, no matter how challenging the nature of job is. In short, these results offer a valid support for the strain and buffer effects of JD and JC respectively.

Additionally, the JD and JC are also tested in this study for their direct effects on burnout. The results indicate a significant positive effect of JD on BO demonstrating that healthcare professionals, in the context of Pakistan, experience burnout due to their job demands. This result is in alignment with previous studies including a local study by Adil and Baig (2018) which also support the fact that demanding jobs cause BO. Despite of the positive results, it is still recommended for future studies to identify the type of job demands which contribute more towards causing burnout (Konze et al., 2017). This may serve as an important discovery to the JDC literature as well as employers to consider those job demands which yield healthy yet challenging jobs. However, the direct effects of JC on BO were not significant, indicating to test JC further as a buffer variable. This is a unique and interesting finding of this research where JC, in contrast to the previous literature, has shown no direct effects on BO. Despite of having significant direct effects on PWB, the insignificant effect of JC on BO may be attributed to the nature of job control which may not be effective in decreasing the BO among employees. The job control, being measured in this study through Karasek's decision latitude and decision authority, may not found out to be effective to counter the BO. This opens up new avenue for

future researches, in the context of Pakistan, to discover the type of JC which can prove to be effective for doctors, surgeons and nurses while dealing with the BO.

The current findings further highlighted that BO mediates the JD-PWB relationship, thus contributing to the literature by helping to explain the mediated mechanisms and emphasizing associations between demanding jobs in the healthcare industry and employees' PWB. The mediating effect of burnout can be attributed to fatigue, exhaustion, and stress, which usually result from workload and impair PWB (Smoktunowicz, et al., 2015; Adil & Baig, 2018; Salanova et al., 2014; Golonka et al., 2019; Padyab et al., 2016).

This finding is extremely important to justify the relationship between JD-PWB as well as the purpose of the current research. The demanding jobs impair the PWB of employees via causing emotional distress, mental burnout and workplace stress which hinders in creating sustainable jobs, workplaces and employees' health. While contributing for the UN's SDGs 2030, the employers in Pakistan are obliged to craft jobs which are not only profitable for the businesses but also ensure well-being of employees. Hence, the job demands in the health care setting in Pakistan requires careful consideration at the time of job design in order to yield productivity and profitability for employers and healthy living for employees.

Notably, however, the mediating effect of burnout in the JC-PWB relationship was not found to be significant. It is generally perceived that control over various job aspects help employees reduce burnout, which may be effective for improving mental health (Bakker A. B. et al., 2003; Bliese et al., 2017); however, the insignificant results in our study may reckon the effectiveness of JC only when coupled with job demands. It raises a question on whether or not healthcare providers in Pakistan are provided with sufficient job control. This argument is further reinforced by the results of the moderation analysis.

In the current study, JC was also tested as a moderator in the relationship between JD-BO. Contrary to previous research (Viotti & Converso, 2016), our study revealed an insignificant mediating role of JC. This insignificant result may be attributable to the lack of job control or a mismatch of job control with demands (Pisanti et al., 2016). As mentioned in the literature review, the JDC model presents a matching principle that builds upon the need to offer employees JC, as per the nature of JD (Kozen et al., 2017). Thus, these results open a unique avenue for future researchers to inquire about the matching principle in terms of JD and JC among healthcare providers. Despite theoretical support for the buffer role of JC (Viotti & Converso, 2016), an insignificant buffer effect in our study indicated the need to further analyze types of JC in-depth, in the context of

Pakistan. Furthermore, there seems to be a need to extend the JDC model by testing other factors that play an equally important role, to counter the damaging aspects of JD. Among such factors, certain personal resources, including personality traits (Smoktunowicz et al., 2015), may be important to test as moderators (Györkös et al., 2012).

5. Conclusion

This study examined the JDC model in the healthcare industry of Karachi. The findings indicated the direct effects of job demands in causing burnout, as well as reducing employees' PWB. The main contribution of the study was establishing the mediating effects of burnout, as well as the ineffective buffer role of job control, which appeared insufficient to help employees cope with damaging effects of their jobs.

Our study also has certain limitations. First, this was cross-sectional research that examined the variables at a single point in time. A longitudinal study could be more suitable to study the damaging effects of JD on employees' PWB in Pakistan. Second, we only studied psychological job demands for their adverse effects on the PWB of healthcare employees. Future researchers can incorporate and empirically test other types of job demands. Third, the results in this study indicated the inefficacy of JC in buffering the effects of JD. Future research should consider the matching principle, to further study the appropriateness of both JD and JC. Finally, our study used only a single moderator, suggesting a need to incorporate other moderating variables, such as personality, into the JDC model to examine how strain effects caused by JD can be reduced. The results of this study could prove to be helpful for policymakers, employers, and employees in understanding how workplace stress can take a toll on employees' health and PWB. Realizing the significance of psychosocial work environments, demanding job aspects, and the nature of resources provided to employees in the workplace, can serve as a first step toward developing healthy and sustainable workplaces in Pakistan.

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