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# IMPACTS OF QWL (PROMOTION & WORK ENVIRONMENT) ON DOCTORS' PERFORMANCE IN PUBLIC SECTOR HOSPITALS OF PAKISTAN

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ARTICLEINFO	A B S T R A C T
Article history: Received 22 July 2019 Received in revised form 29 November 2019 Accepted 12 December 2019 Available online 23 December 2019 Keywords: Quality of Work Life (QWL); Individual Work Performance; Doctors' work performance; Hospitals' performance.	This study investigated the relationship between promotion, work environment and performance. The survey approach was used. Cross- sectional data were collected and used in the analysis. The descriptive and inferential statistics such as mean, standard deviation, correlation, regression, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and Cronbach's alpha were used. SPSS®25 and AMOS-SEM18 were used for statistical analysis. The findings revealed that all the scales were reliable, valid and all the variables are significantly and positively related to each other. It is concluded that promotion is the most significant and dominant variable in the model for improving the performance of employees. This research is helpful in bringing valuable information to the government of Pakistan by considering this concept/variable as a tool for enhancing the doctors' performance in the above-mentioned context.
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# **1 INTRODUCTION**

For modern organizations to be successful, they need to be more flexible so that they are equipped to develop their workers and enjoy their commitment. A workforce that is well equipped and highly committed is more likely to be very effective which is very important for every organization. The Quality Work Life (QWL) is related to organizational conditions and practices that aim at promoting the employee's mental and physical health, safety and satisfaction (Almalki et al., 2012). A high QWL is essential for organizations to continue to attract and retain high performing employees. The importance of healthcare institutions in any country, particularly developing countries like Pakistan cannot be overestimated. The health care system exerts a direct influence on productive capacities of country. Sustainable development in healthcare sector is not possible without the contribution of high performing doctors who serve hospitals (Hsu & Kernohan, 2006).

It is, therefore, necessary to conduct studies that are intended to inform and assist decisionmakers in hospitals in identifying the key workplace issues that would help in developing the strategies to address and improve the performance of doctors in public sector hospitals. Researchers observed that a high quality of work life (QWL) is essential for organizations to achieve high performance (Azril et al., 2010; Deb, 2006). The way doctors who work in hospitals perceive their work environment influences their level of performance. Although improving the QWL is important to the well-being and development of employees, it has not attracted adequate attention in developing like Pakistan. This study presents addressed these concepts by providing new and valuable information thereby conducting the field study on the quality of the work life and individual (doctors) work performance of the hospitals in Pakistani (Khyber Pakhtunkhwa) context by generalizing the findings.

### **2 LITERATURE REVIEW**

#### 2.1 QWL

Generally, QWL has been defined as opinions and impressions regarding employees' organizations working conditions. The majority of the literature on the nature of QWL of work life shows that the concept is latent, multidimensional in nature, and need-based. Sirgy et al. (2001) conceptualize QWL as need-based categorizing QWL into higher-order needs and the lower order needs (Schaubrock & Ganster, 1991). Lower order needs are comprised of the health/safety needs, and economic /family needs (Tabachnick & Fidell, 2002). The higher-order needs are comprised of the social needs, esteem needs and self-actualization needs, knowledge needs, and aesthetic needs.

### 2.1.1 PROMOTION

Some employees like equality at the work, some like benefits provided by their job, or others satisfied with the degree to which they have the power to take the initiatives at their workplace during the job. In this research, we will study the effect or influence of promotion upon doctors' work Performance. Promotion is worker recognition efforts and his commitment to work (Borman & Motowidlo, 1993). Getting higher and higher promotion is the ultimate desire of each person working in any sort of organization. Promotion is a Shifting of an employee for a job of higher significance and higher compensation. The movement of an employee upward in the hierarchy of the organization, typically that leads to enhancement of responsibility and the rank and an improved compensation package is a promotion (Koopmans et al., 2011).

### 2.1.2 WORK ENVIRONMENT

QWL is a process by which the organizations' personnel and stakeholders learn how to work better together to simultaneously improve staff quality of life and individual work performance and thus improving organizational productivity. An attractive and supportive work environment is critical to the employees' task performance (Almalki et al., 2012). The work environment can be grouped into three distinct forms. These are the physical work environment (an environment that deals with the physical or tangibles at the setting where the job is performed), psychological work environment (a set of characteristics of work environment that affect how the worker feels (Hamid, 2012). The psychological work environment provides a good description of the mental activities that a worker undertakes during working hours or at the post) and social work environment (deals with relations at job settings. It includes communication styles, the relationship between superiors and subordinates. It includes the relationship among coworkers, the readiness of others to assist and teamwork (Awan, 2014).

## 2.2 INDIVIDUAL WORK PERFORMANCE

Individual work performance is an issue that has not only grasped companies all over the world but also fueled a great deal of research in fields of management, occupational health, and work and organizational psychology. Numerous studies on individual work performance have been conducted (Viswesvaran & Ones, 2000). Still, diverse approaches to studying individual work performance circulate in recent literature. Whereas the field of management has primarily occupied itself with how one can make an employee as productive as possible, the field of occupational health has focused on how to prevent productivity loss due to a certain disease or health impairment (Vandewalle, 1995). Work and organizational psychologists, on the other hand, have an interest in the influence of determinants like work engagement, satisfaction, and personality, on individual work performance.

### 2.3 QWL AND INDIVIDUAL WORK PERFORMANCE

The conclusion that can be drawn from the literature on the link between the EWL and the work performance is that QWL has a positive association with work performance. Rossmiller (1992) found that QWL positively influenced the respect accorded to teachers, teacher participation in decisions affecting work, professional collaboration and interaction, use of skills and knowledge and the teaching-learning environment. Madlock (2008) argued that interpersonal communication (respecting others, working together, believing others and sharing information) does have a positive impact on the employees'satisfaction and work performance. A study by Azril et al. (2010) also found that nine aspects of work life studied have significant and positive relationships with work performance where the highest relationship occurred between individual and family life with work performance. It is thus hypothesized that

H1: Doctors Perceived (QWL) is positively related to their work performance.

## **3 RESEARCH METHOD**

Researcher collected the data by using the survey as it is a most feasible, common and easy way to collect large amounts of data from big populations in less time and cost. All the district public sector hospitals from Khyber Pakhtunkhwa were included in the population. In hospitals, only doctors were the target population. A nonprobability convenience sampling technique was used for sampling. All the instruments were adopted from previous research and then modified some items, statements to ensure clarity of items for the respondents. Now, instruments are adapted. At initial stage, pilot testing was conducted to ensure reliability and validity of the scales. Initially, 30 respondents were contacted after getting ethical permission from the management of hospitals. Questionnaires along with a cover letter explaining the aim of the study were distributed in respondents. In addition, respondents were ensured that their names and data would be kept confidential. The researcher distributed 300 questionnaires out of 300, 235 were received back in which 11 were incomplete so those questionnaires were discarded from analysis and 224 were used in analysis yielding a response rate of 74.6%.

# 4 ANALYSIS RESULT

Co-linearity happens when all the independent variables are highly correlated with each other. This effects beta values and researcher inferences about sample and population got affected. So first researchers have checked multicollinearity, this can be checked by the VIF variance inflation factor and it should be less than 10 and Tolerance T value it should be higher than 0.10. All the values of VIF and T were in the specified range. When data is collected by using the same survey, same scale and same time its validity is questionable. For this purpose, the researchers suggested to checked common method bias (CMB) by using Harman Single-factor analysis. It was run and found that the first factor was explaining variance less than 50% it means that CMB is not a major issue in this study.

From the analysis, results revealed that there are 224 respondents participated in the study. From the analysis, it is revealed that there were 164 (73.2%), male respondents, while 60 (26.8%) were females participated in this study. Further analysis of results also revealed that majority of the respondents belongs to age group of 20-30 years i.e. 84 (37.5%) followed by age group of 51-60 years i.e. 77 (34.4%), likewise 49 respondents belong to the age group of 31-40 years i.e. (21.9%) and minimum number of respondents belongs to age group of 41-50 years (6.3%). Similarly, the majority of respondents were holding MPhil degrees i.e. 161 (71.9%) followed by 42 (18.8%) were holding master degrees and only 21 doctors were having doctoral degrees (9.4%). In the analysis, it was identified that the majority of the respondents were assistant professors i.e. 72 (32.1%) while followed by associate professors 59 (26.3%) and lecturers were 45 (20.1%) number of professors were identified as 48 (21.4%). 152 (67.9%) respondents had the experience of 1-10 years, followed by the respondents having experience of 20 years i.e. 52 (23.2%) and only 20 respondents were having experience of 20 years i.e. 52 (23.2%) and only 20 respondents were having experience of 20 years i.e. 51 local respondents and 93 nonlocal respondents. Same data for married and single respondents, see Table 1 and Figure 1.

S#	Variables	Characteristics	N	Percentage
1 (	Condor	Male	164	73.2
	Genuel	Female	60	26.8
		20-30	84	37.5
2	1 99	31-40	49	21.9
L	Age	41-50	14	6.3
		51-60	77	34.4
		Master	42	18.8
3	Education	MPhil	161	71.9
		PhD	21	9.4
		Lecturer	45	20.1
4	Designation	Assistant Professor	72	32.1
4	Designation	Associate Professor	59	26.3
		Professor	48	21.4
		1-10	152	67.9
5	Experience	1-20	52	23.2
		21-30	20	8.9
6	Domicile	Local	131	58.5
0	Domicile	Non Local	93	41.4
7	Marital Status -	Married	131	58.5
7	iviainai Status –	Single	93	41.4

Table 1: Demographic Information

Ν	Variables	Items	Mean	SD	ITC	Alpha	KMO	Variance	EFA	AVE	CR
1	Promotion	Item 1	3.22	1.47	0.713	•	0.733	54.0%	0.882	0.540	0.850
		Item 2	3.36	1.16	0.657				0.831		
		Item 3	3.08	1.08	0.610	0.775			0.782		
		Item 4	3.51	1.17	0.448				0.605		
		Item 5	3.28	1.24	0.354				0.505		
		Item 1	3.53	1.15	0.628		0.782	74.5%	0.847	0.720	0.928
	Work	Item 2	3.67	1.11	0.664	0.760			0.824		
2	Environment	Item 3	3.50	1.05	0.650				0.820		
		Item 4	3.48	0.97	0.621				0.783		
		Item 5	3.27	1.02	0.134				0.959		
	Derfermen	Item 1	3.54	1.11	0.362	0.736	0.720	58.3%	0.439	0.363	0.844
		Item 2	3.51	1.16	0.214				0.654		
		Item 3	3.36	1.18	0.193				0.458		
		Item 4	3.47	1.05	0.335				0.430		
2		Item 5	3.55	1.09	0.343				0.458		
3	renomance	Item 6	3.22	1.47	0.577				0.802		
	-	Item 7	3.36	1.16	0.553				0.759		
		Item 8	3.08	1.08	0.522				0.718		
		Item 9	3.51	1.17	0.508				0.630		
		Item 10	3.51	1.10	0.366				0.525		

Table 2: Reliability and Validity

It was necessary to report reliable and valid instruments. For this purpose mean and standard deviation criteria was set. Those items having S.D<0.3 were decided to exclude from the analysis. Table-2 shows item summaries of promotion variable it is noted that highest mean is recorded for item4 i.e.  $M_{p4}$ = 3.51,  $SD_{p4}$ = 1.17, followed by item 2  $M_{p2}$ = 3.36,  $SD_{p2}$ = 1.16, while lowest mean score was identified for item 3,  $M_{p3}$ = 3.08,  $SD_{p3}$ = 1.08. The same criteria were set for the work environment. Highest mean was identified for item 2  $M_{we2}$ = 3.67,  $SD_{we2}$ = 1.11, followed by item1  $M_{we1}$ =3.53,  $SD_{we1}$ = 1.15, lowest means core for work environment was recorded for item 5  $M_{we5}$ =3.27,  $SD_{we5}$ = 1.02. For individual performance variables same criteria were set. Highest mean for item 5  $M_{Per5}$ =3.55,  $SD_{per5}$ =1.09, while lowest mean was recorded for item 8,  $M_{Per8}$ = 3.08,  $SD_{per8}$ = 1.08, from the above analysis it was concluded that all items for promotion, work environment and performance met set criteria. All items were retained for further analysis. Further reliability analysis was run to check inter item correlations through Item Total Correlation (ITC) and Cronbach's alpha. Cronbach's alpha is accepted at 0.7, while 0.8 is considered good and 0.9 is considered as excellent. While for ITC criteria is 0.3-0.4 as per the existing literature.

For promotion, all items have ITC values higher than 0.3 and the overall alpha value is 0.775, for work environment all items met criteria except for item 5 but it was not excluded as overall alpha is higher than 0.7 i.e. 0.760. for performance two items, items 2 and 3 have ITC less than 0.3 so these variables can be excluded to increase alpha value but still alpha for performance is 0.736 still acceptable. Instruments and scales for Quality of work life (promotion & work environment) and performance are found reliable. Kaiser Mayer Olkin (KMO) is used to check the sampling adequacy. It was found KMO = 0.733 for promotion, KMO= 0.782 for the work environment, and for performance KMO= 0.720. It is recommended that KMO values should be greater than 0.50, in this study KMO for all variables is higher than 0.5, oblique rotation and the Promax method was sued for rotation and criteria for factor loadings were set at 0.40. it is noted that Table-2 all the factor loadings for all items of promotion and work environment and performance are higher than 0.4. Average variance extracted (AVE) for promotion is =0.540, and Construct Reliability (CR)

=0.850. for work environment AVE=0.720 and CR=0.928, for performance=0.363, CR=0.844 though AVE for performance is less than 0.40 but CR is higher than 0.7 so ITC is acceptable no issue of validity. All the items and variables and their scales are found reliable and valid (Hillsdale et al., 1993).



**Figure 1**: Measurement Model Confirmatory Factor Analysis (P: Promotion; WE: Work Environment; PERF/PR: Performance).

AMOS-SEM 18 was used for confirmatory factor analysis (CFA). Criteria for factor loadings for set at 0,50. But criteria for other goodness of fit such as goodness of fit index (GFI), Bollen's Incremental Fit Index (IFI), Comparative fit index (CFI), Tucker-Lewis Index (TLI), Normed Fit Index (NFI); Relative Fit Index (RFI), are set >0.90, and for Root Mean Square Error of Approximation (RMSEA) <0.08 for chi-square less than 3. Figure 3 shows that all the items of promotion, work environment, and performance have factor loadings greater than 0.5 but two items were deleted from promotion because of low factor loadings, one item was excluded from work environment and eight items were deleted from the performance. RMSEA= 0.06 <0.08, GFI=0.955>0.90, IFI=0.970>0.090, CFI=0.970>0.90, TLI=0.953, NFI=0.944, RFI=0.912 all are greater than 0.90. Chi-square/df =2.072. Therefore, the above model is found fit for the present research and context in highlighting the issue and measure. These indicate the model fitness in the entire procedure.

### 4.1 CORRELATION ANALYSIS

As this data was normally distributed, so Pearson correlation as used. Correlation 0.1 to 0.4 is considered weak, 0.5-0.6 is the moderate and 0.7 and 0.9 is considered high. Pearson correlation is used to check the relationship amid promotion, work environment and performance.

Table 3: Pearson Correlation Matrix.								
Promotion Work Environment Performan								
Promotion	1							
Work Environment	.664**	1						
Performance	.858**	.625**	1					

\*\*. Correlation is significant at the 0.01 level (2-tailed).

It was found that the relationship between promotion and work environment is r = 0.664, p < 0.01, it means that flexible promotion policies increase the environment at the workplace and there is a friendly and supportive environment developed by doctors and colleagues in the hospitals. While the relationship between promotion and performance is r = 0.858, p < 0.01 it means that when

doctors got flexible promotion opportunities then their performance will increase. Similarly, the relationship between work environment and performance is r = 0.625, p < 0.01. it means that when there is a friendly work environment, the performance of doctors will be enhanced and they become productive members of the organizations.

# 4.2 REGRESSION ANALYSIS

There are three types of regression, multiple regressions, stepwise and hierarchical multiple regressions. In this study, multiple regressions are used. Before regressions analysis data must fulfill certain assumptions, including a minimum observation number 15-20; data must be normally distributed; there must be no multicollinearity and no heteroscedasticity problems.

Table 4: Regression Analysis										
DV	IV	D	<b>D</b> <sup>2</sup>	$A d; \mathbf{P}^2$	F	ß	t	n	Collinear	
D.v	1. v	К	К	Ацј к	Г	р	ι	Р	Т	VIF
Performance	Constant	0.861	0.742	0.739	317.350		12.33	< 0.001		
	Promotion					0.793	17.341	< 0.001	0.559	1.79
	WE					0.098	2.140	0.003	0.55	1.79



Figure 2: Heteroscadasticity.

Our data fulfills all assumptions so the researcher may proceed for regressions analysis. In this study promotion and work environment are predictors and performance is the criterion. Table-4 shows regression analysis results. It was found that promotion and work environment shows variance upon performance i.e.  $R^2=0.742$ , which means 74.2% variance is explained by promotion and work environment. The goodness of fit index or model fitness is checked by F Statistics F = 317.350, p<0.01. Further analysis of results revealed that for performance, promotion shows  $\beta_p=$  0.793, p<0.01, it means that one unit change in promotion policies could bring a 79.3% change in performance of employees this means that performance could be enhanced by offering flexible promotion policies and opportunities in the healthcare organizations. For performance work environment shows  $\beta_{we}=$  0.098, p<0.05. This means that a 9.8% variance is explained by the work environment upon the performance of employees. t statistics are also found significant and it is also identified that there is no issue of colinearity in Table-4. As T statistics are higher than 0.1 and VIF values are less than 10. There is no issue of heteroscedasticity in Figure 3.

## **5 DISCUSSION**

Aim of this study is to find the relationship between promotion, work environment and performance. For this purpose data was collected from healthcare organizations' professionals

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working in all over KP state. 224 respondents participated in this study. Most respondents were male and having Mphil degrees. Descriptive statistics and inferential statistics using SPSS®25 and AMOS-SEM18 were used for the analysis of results. Mean standard deviation was used, criteria for S.D were set at 0.30, all the items met the criteria and reliability of scales were checked by Cronbach's alpha and ITC values. Criteria for ITC were 0.40, while for Cronbach's alpha is 0.70 (Field, 2013). All the items show ITC values higher than 0.40 except few items, these items were deleted from further analysis in CFA. The reliability of all the variables is found satisfactory i.e. above 0.70 and results of exploratory factor analysis (EFA) are also found valid. The average variance extracted and construct reliability are also computed from factor loadings of EFA for promotion, work environment and performance all the values met the standard criteria except AVE for performance but its CR is reliable so there is no issue.

CFA is run to further refine the scales. Two items from promotion, one item from the work environment and eight items from performance were deleted because of low factor loadings i.e. 0.50, all the index show satisfactory values i.e. GFI, CFI, IFI, RFI, RMSEA. Further analysis revealed that there is a moderated correlation found between promotion and work environment, while high correlation as found between promotion and performance likewise moderated correlation as found between work environment and performance (Huang, 2005). These results are in line with the result of Almalki et al. (2012) reporting the positive and significant relationship between these predictors and criteria. Further, these results got support from the results of Azril et al., (2010) and Huang (2005) about the positive relationship between these variables.

### **6** CONCLUSION

This study finds that promotion and work environment are important factors to bring change in the performance of employees, among promotion and work environment. Promotion is found as the most dominant variable from beta value. So, the organizations in Pakistan should provide doctors flexible promotion opportunities so that they get benefits from their efforts and struggle.

### 6. DATA AND MATERIAL AVAILABILITY

Information regarding this study is available by contacting the corresponding author.

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