

Role of Supportive work environment in healthcare organization: Mediating relationship of psychological capital

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ABSTRACT

Keywords:

Supportive work Environment
Psychological Capital
Quality of Care

The significant role of the study is to determine the mediating of psychological capital between a supportive work environment and quality of care in the health sector. This study is one of the first to test the direct and indirect impact of a supportive work environment and quality of care in Pakistani healthcare centres. The proposed model was tested using a sample from doctors, and nurses working in healthcare organizations of Khyber Pakhtunkhwa. Questionnaires were distributed to 340 employees. A total number of 244 questionnaires were returned, with a response rate of 72%. For this study, four hypotheses were developed to achieve the objectives. The current study investigated direct impact of supportive work environment on quality of care. Specifically, the model was also examined the indirect impact of a supportive work environment on quality of care. The Structural equation modeling technique was used to test hypotheses. The result of the study suggested that a supportive work environment has a significant effect on the quality of care. Second, the mediating effect of psychological capital between supportive work environment and quality of care was significant. The reported findings of the study provides valuable insights of the research in different ways as a contribution to the literature as well as to the practitioners and policy makers by providing few guidelines.

INTRODUCTION

The healthcare system in Pakistan comprises of public and private sectors providing primary, secondary and tertiary care systems. Primary and Secondary hospitals in Pakistan much under the public sector in the form of basic health units, dispensaries, maternity and child health centres, district and rural health centres. According to the study by social and living standards measurement conducted in 2015-2016, 67.4% of Pakistani consult the private sector for healthcare. The public health sector provides inadequate staff especially in secondary hospitals, furthermore lack better working environment which reduced job satisfaction and effect quality outcomes. Khyber Pakhtunkhwa is one of the country's administrative provinces. Khyber Pakhtunkhwa geographically is the smallest province with 26 districts and 7

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divisions. The majority of the population reside in rural areas, Peshawar is among the few densely populated urban centre and according to 2017 preliminary census population of Peshawar is 2.1 million. According to the Government of Khyber Pakhtunkhwa health sector strategy HSS 2010-2017, Khyber Pakhtunkhwa had to face many challenges and overcome certain weaknesses. The health outcomes need substantial improvement in the province. After the 18th amendment in the constitution of Pakistan, health administration devolved to the provinces. The government of Khyber Pakhtunkhwa has three tiers which include district, tehsil, and village. The rural health centres, mother and child health centres, public hospitals and basic health units have been devolved in districts. Teaching and tertiary hospitals are devolved into the province. The power of an individual's psychological development is characterized by optimism, hope, resilience, and self-efficacy (Luthans, Avolio, Avey, & Norman, 2007). Individuals often challenge themselves with great determination to achieve difficult tasks and goals Individuals with hope set their goals and expectations through self-determination. In comparison to the hopeful individuals, optimists adopt change and see opportunities (Luthans et al., 2007). A positive attitude is observed in employees

with high resiliency. Recently more attention has been given to PsyCap due to its contribution to positive behaviours. Employees were found more satisfied with their job with PsyCap and helped co-workers (Jung & Yoon, 2015). It is important to analyse the role of psychological capital for developing better organizational results, as knowing the fact psychological capital does not create in a vacuum. The Role of a supportive work environment played a significant role in concern with valuable contributions to the hospital and has an impact on quality outcomes. Psychological capital is a critical component in the health sector which needs a positive work environment in contributing the quality of health services. Pakistan's healthcare organizations face a paradoxical challenge of to meet increasing demand with limited resources. A supportive and attractive workplace attracts individuals in healthcare and encourages them to perform effectively.

Research Objectives

- To determine the effect of supportive work environment and its impact on quality of care
- To investigate mediating role of psychological capital between supportive work environment and quality of care

LITERATURE REVIEW AND HYPOTHESES

Supportive work environment

According to organizational support theory, employees in an organization can stimulate positive and favourable actions based on the level of support employee's experience in their work environment. Perceived organizational support outcomes associated with employee involvement, and quality of care (Eder & Eisenberger, 2008). Organizational support can be identified in different foci which includes support for training, social support and interaction among group members. Supportive work environment can stimulate sense of ownership and reciprocity toward the organization which translates important outcomes, such as enhanced sense of obligation and employee performance which in turn, improve health care. Employee's experience on career growth opportunities, status of facilities, job autonomy, rewards, co-worker support and supervisor support have impact on perceived organizational support. Health care quality is based on the resources which actually provided in organizational setting particularly human resources, physical resources which predominantly relates to organizational support and may leads to better satisfaction for healthcare professionals. Apart from the organizational support theory another theory social exchange also established relationships with organization and co-workers (Hayhurst, Saylor, & Stuenkel, 2005).

Quality of care

Quality of care is relatively new area and most of the studies published in healthcare organizations. Health care structure based on two important elements; actual care is related to the (process) whereas (outcome) is related to sequence of interaction between individuals and healthcare. Structure in healthcare system refers to physical and staff characteristics. The most basic dimension of healthcare is to provide services and facilities which meet the needs of patients in the hospital. Improved outcomes is increasingly centeredness to the patients and a set of skills doctors' practiced for providing services to the individuals. Availability of resources is subject to the access of health facility and the availability of appointments provided to the patients' (S. Campbell, Braspenning, Hutchinson, & Marshall, 2002; S. M. Campbell, Roland, & Buetow, 2000)

Supportive work environment and quality of care

The Supportive work environment can be described as an environment that attracts individuals to

perform effectively and can develop a healthy workforce that could influence the quality of care. The characteristics of a supportive work environment affect individual satisfaction that can develop discretionary behaviour in doctors, nurses and other health workers in the hospital. Supportive work environment attribute includes peer group, and supervisory support. Improvement in the working environment are necessary for better individual as well as organizational outcomes. According to the previous studies, perceived organizational support and co-worker support reported more satisfying working conditions (Koslowsky, Schwarzwald, & Ashuri, 2001). The quality of care in hospitals can be improved with a healthy work environment and doctors who perceived better organizational climate would respond effectively. Health workers faced high job demands which have a detrimental impact on quality outcomes furthermore, supervisory and co-worker support may play central roles to promote a positive work environment for doctors, nurses and other support staff in hospitals (Karasek, 1998). Another study of (Kurtessis et al., 2017) analysed the role of perceived organizational support and found that organizational members which include supervisors and co-workers can stimulate positive workplace outcomes in response to a supportive work environment. In a more recent study, (Ogbonnaya & Valizade, 2018) reported that positive correlations between healthcare performance and employee outcomes, also show evidence that employees are likely to perform well through organizational support and uphold positive values of an organization.

Hypothesis 1: There is a direct, positive relationship between a supportive work environment and quality of care

Hypothesis 2: There is a direct, positive relationship between a supportive work environment and psychological capital

The Mediating role of psychological capital between supportive work environment and quality of care

Psychological Capital acknowledged as a positive and high-performance construct (Abbas & Raja, 2015) which explicate such as self-efficacy by taking confidence is a compulsory effort to complete the task, optimism is developing a positive attitude to be successive in present and future, while hope is a continuous approach towards a goal to be successful and resilience as nourishing and taking actions to stand strong even when surrounded by difficulties and hardships (F. Luthans, Youssef, 2007). The science of positive psychology is essentially a positivity of individual personality, positivity concerning person experience, the positivity of organizations to develop and enhance the quality of life and avoid different cognitive disorders that are developed when an individual is depressed (Csikszentmihalyi &

Seligman, 2000). According to Nelson and Cooper (2007), positive organizational behaviour emphasizes more on the strengths of their employees relatively than weaknesses. As a matter of fact, in the organization Psychological Capital navigate to raise the value of humans (skills and knowledge of particular employee) and social (individual social network) capital (Stajkovic & Luthans, 2001). Psychological capital can be achieved by little investment as done for social and human capital and as well as unlike traditional capital. Psychological capital is related to positive job outcomes specifically related to performance, satisfaction and turnover intentions (Luthans, Norman, Avolio, & Avey, 2008). According to the positive psychological literature, Psychological Capital and its abilities or resources are not just a fixed characteristic but it is comparative/ superlative (Avey et al., 2010). As there are no common features in positive attributes and conditions empirically and conceptually, therefore modern studies also support their uniqueness and discriminant validity (Avey, Luthans, Smith, & Palmer, 2010). Similarly another study of (Hannah & Luthans, 2008) provide a model in which Psychological Capital is planned to come from self-motivated practices that stimulate expectations, aims, norms and values and self-monitoring ideas which are started particularly and are specifically linked to the setting or situation. While on the other side, trait-like attributes are universal which give usual or trained responses that are shown on chronic stimulation of intellectual affective processing units. Exposure and prearranged provocations can guess the response. There might be people who show general efficacy which is a trait-like construct not state like, theorized by (Bandura, 1997), which makes them more confident and successful in different situations and settings over time. While self-efficacy (according to Bandura, 1997, it is a state like construct and a very important part of Psychological Capital) is related to area or field and it can be created for a particular setting, situation or a job by having experience, demonstration, motivation and physical and mental arousal these characteristics of Psychological Capital tend to create positive expectations and stimulate goal setting, achievement and motivation which leads to persistence and success in a specific situation. The social cognitive theory provides the basis for Psychological Capital (Bandura, 1997), which creates mutual relations between people, their past performance or behaviour and the environment. It supports the difference between trait-like attributes and flexible Psychological Capital construct. Moods, feelings, and sentiments are short-lived or temporary as compared to state like Psychological Capital. Psychological Capital capabilities should be maintained to achieve success and to achieve goals. Therefore, it is concluded that psychological capital may play a role in between supportive work environment and employees' performance. Particularly in organization the employees who perceive that there exists a supportive environment are likely to

experience higher

psychological capital which in turn can produce better employees' outcomes, such as in case of a health worker which would further demonstrate the importance of psychological capital in supportive environment and its impact on quality of care

Hypothesis 3: Psychological Capital mediated the relationship between supportive work environment and quality of care

Hypothesis 4: Psychological Capital has a significant positive impact on quality of care

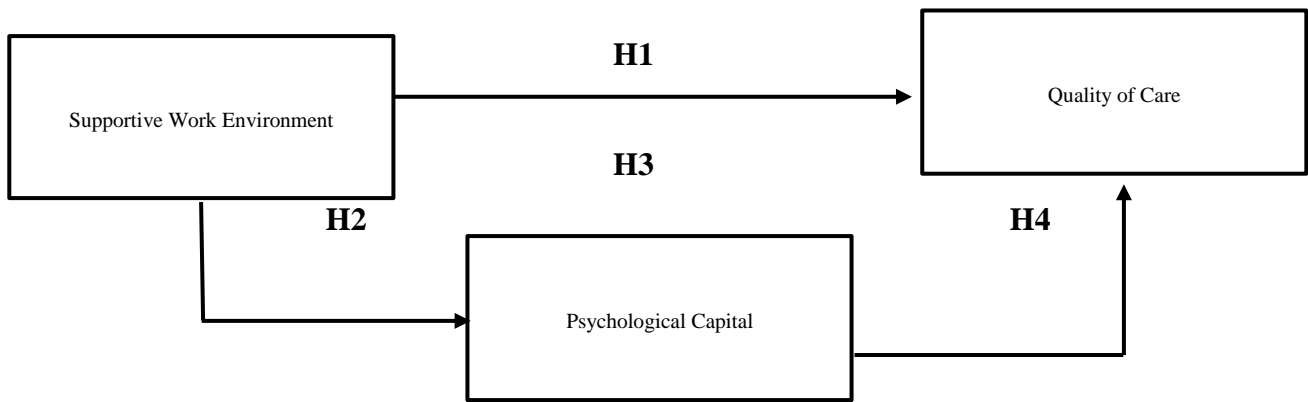


Figure 1: The Research Model

Research Methodology

The study population refers to the collection of total elements out of which a representative sample is drawn for a research through which certain conclusions may be derived (Schindler & Cooper, 2006). Since it is impossible to study the carry out a census and study each element of the population, a representative sample whose characteristics match those of the entire population selected, and that represent the study population to draw valid conclusions about it. Based on the objectives, direct, mediation hypotheses were formulated. To achieve the objectives of the study and test hypotheses, theoretical justifications discussed. For the current study data collected from a secondary and tertiary hospital. A sample of 340 was initially collected from which 244 were useable for proposed objectives. The population of the current study consists of full time health workers i.e. clinical staff, doctors, nurses, health directorate officials of the Peshawar region. The sampling frame obtained from certain

organizations such as the health directorate, territory hospitals of Peshawar region including Leady

Reading Hospital, Khyber Teaching Hospital, Hayatabad medical complex, and district as well as zonal hospitals under health department of KP

Table 1 Construct reliability and validity

Constructs	rho_A	Composite Reliability	AVE
Hope	0.776	0.816	0.540
Optimism	0.751	0.809	0.537
Self-efficacy	0.713	0.821	0.536
Resilience	0.792	0.839	0.569
Perceived Climate	1.064	0.910	0.771
Perceived group interaction	1.663	0.842	0.645
Perceived organizational support	0.940	0.906	0.764
Supervisory relationship	0.956	0.955	0.876
Quality of Care	0.876	0.898	0.603

According to table 1 in which the value of AVE reflects overall amount of variance in the indicators, were in the range of 0.536 and 0.876 and depicts that values are exceeded recommended values. Composite reliability, factor loadings and AVE used to access the convergent validity. Composite reliability indicate the latent construct values ranged from 0.809 to 0.955, which exceeded from the threshold value of 0.7.

Table 2 Fornell- Larcker Criterion

	PC	PsyCap	QC	SR	PGI	POS
PC	0.880					
PsyCap	0.032	1.000				
QC	0.083	0.188	0.772			
SR	0.101	0.543	0.286	0.935		
PGI	-0.153	0.283	0.009	0.259	0.807	
POS	0.136	-0.017	0.195	0.320	0.324	0.877

According to table 2 which pointed out Fornell-Larcker criterion. Discriminant validity is examined squared correlations between the construct and the variance extracted for the construct. Results of the

discriminant validity reveals that the squares correlation is less than the square root of the average variance extracted, demonstrating that discriminant validity results are adequate.

Measurement Model

Measurement model tested and checked all constructs for reliability, convergent and discriminant validity. Based on Table 1, Composite reliability scores were greater than 0.7 which is the threshold suggested by (Hair Jr, Sarstedt, Hopkins, & Kuppelwieser, 2014) while the value of average variance extracted for all constructs exceeded than 0.5. According to (Fornell & Larcker, 1981) average variance extracted of each construct should be higher than the correlation between it. The results of the study demonstrated that based on SEM analysis that a supportive work environment had a strong and

significant direct impact on psychological capital and quality of care among a sample of Khyber Pakhtunkhwa hospital employees. Table 1 shows that values of average variance extracted (ave) exceeded than the recommended value which is 0.5, indicating that convergent validity results are adequate. The values of composite reliability of all constructs were well above than 0.70.

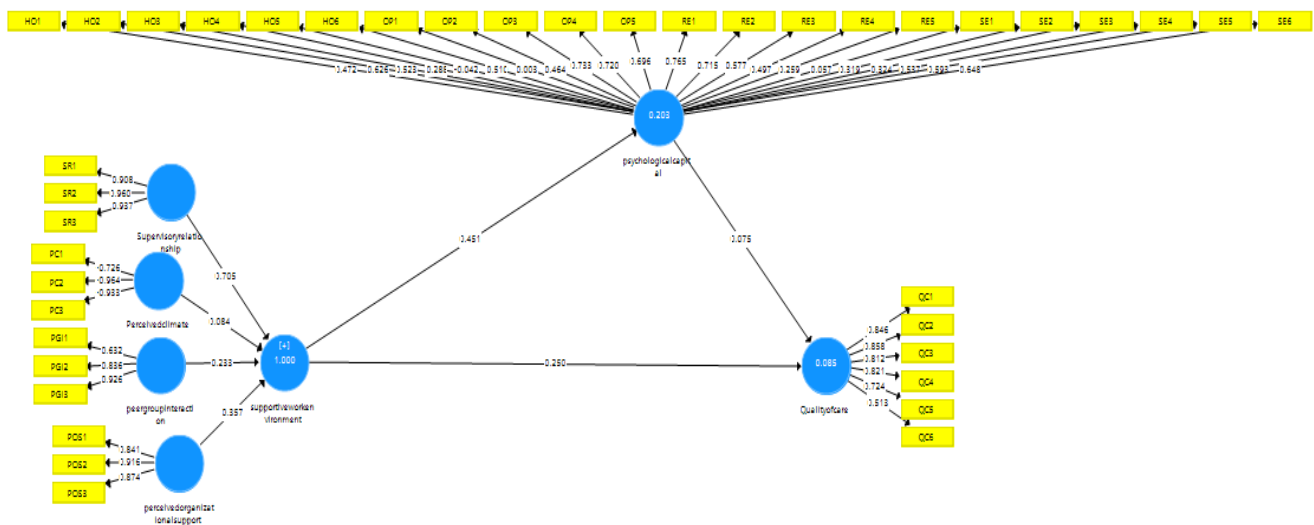


Figure 2. Measurement Model

Table 3 Path Coefficients and Hypothesis Testing

Hypothesis	Causal Path	Beta	Sample		T- Values	P-Values	Result
			Mean	SE			
H1	SWE -> QC	0.703	0.701	0.033	21.185*	0.000	Supported
H2	SWE -> PsyCap	0.686	0.687	0.030	23.031*	0.000	Supported
H3	SWE -> PsyCap -> QC	0.160	0.163	0.030	5.277*	0.000	Supported
H4	PsyCap -> QC	0.234	0.237	0.043	5.451*	0.000	Supported

Beta= regression weight, SE= standard error *p < 0.01

Structural Model

The Structural model used for testing hypothesis, the bootstrapping technique was performed with a re-sampling of 500, t-statistics were calculated for the hypothesized relationships. Table 3 shows the hypothesis testing, from analysis, it was found that psychological capital ($\beta = 0.234$, $P < 0.01$) was positively related to the quality of care. A supportive work environment ($\beta = 0.686$, $P < 0.01$) was positively related to psychological capital. It was also found that a supportive work environment ($\beta = 0.703$, $P < 0.01$) positively related to the quality of care. For mediation of psychological capital, the indirect effect has been tested, ($\beta = 0.160$, $P < 0.01$) results are significant which indicated that there is a mediating effect of psychological capital.

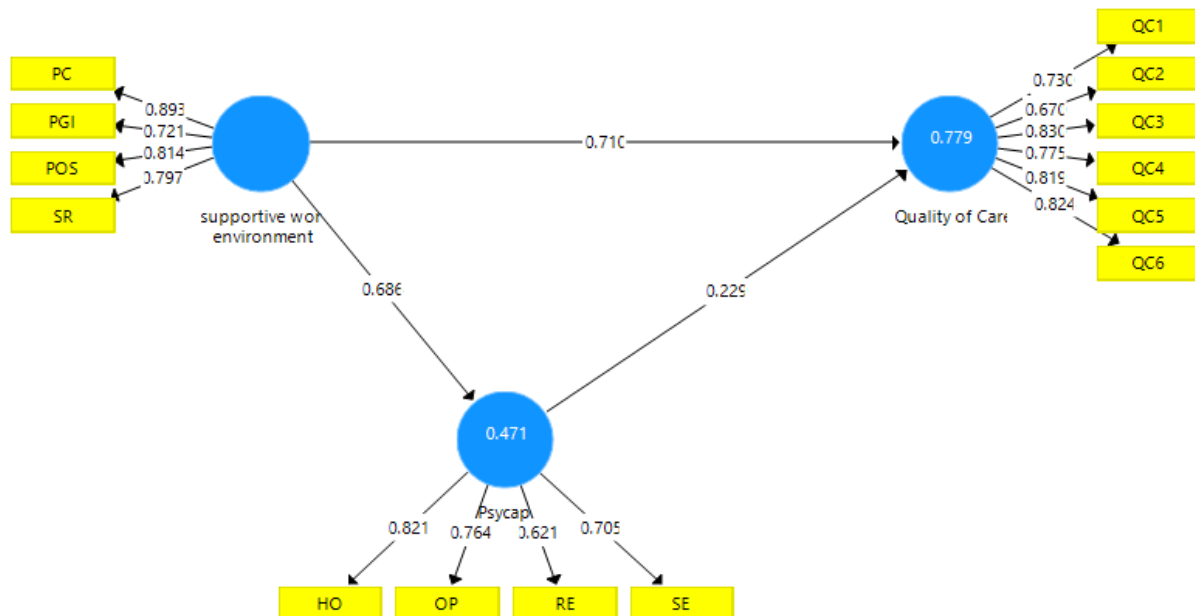


Figure 3. Structural Model

CONCLUSIONS AND MANAGERIAL IMPLICATION

The main purpose of the study was to test the role of a supportive work environment in quality of care and to find out the mediating role of psychological capital. The results of the study found that psychological capital has a significant relationship with the quality of care; H1 was supported (Bao & Taliaferro, 2015). The significant relationship between psychological capital and quality of care shows

that characteristics of psychological capital i.e. hope, resilience, self-efficacy, and optimism have a greater impact on the quality of care: H2 was supported. For this reason, healthcare organizations need to enhance the various level of psychological capital which will achieve better results in the quality of care. Doctors with higher characteristics of psychological capital have a positive effect on combating quality issues in healthcare. Self- efficacy, hope, optimism, and resilience have demonstrated essential influence among doctors and nurses. Psychological capital was a positive and potent predictor of the quality of care in the current study; H3, H4 was supported. Doctors with higher levels of psychological capital might be more resilient and much stronger in work and have more confidence to execute difficult tasks, coping with stressful situations in a more productive manner, as stated by past researchers (Wang, Chang, Fu, & Wang, 2012). The significant relationship between supportive work environment and quality of care shows that healthcare organizations in Khyber Pakhtunkhwa are using the characteristics of the supportive work environment for achieving better healthcare, however, the role of perceived organizational support in doctors, particularly in nurses are relatively weak which indicated that secondary hospitals need to focus on these characteristics of the supportive work environment and enhance the level of perceived climate which further develop supportive working environment resulted in a better quality of care. (Rudy, 2001) asserts that supportive work environment can develop healthy environment which resulted in better quality outcomes. The role of supervisory support has a stronger influence on the quality of care and showed a positive attitude in employees which leads to create a better working environment and promote higher patient satisfaction. In addition, the current study confirms significance of supportive work environment in healthcare organizations. Importantly, current study has extended the studies of quality of care by specifying and evaluating the results. Apart from the conclusion, implication of the study is highly related to health policy decision making in health sector of KP. This study supported that psychological capital has mediated relationship with quality outcomes.

Limitations and future directions

The current study relied on quantitative research methods, although this methodological approach was adequate for achieving objectives of the study, future studies are encouraged to apply another method like multi variance technique. Furthermore, findings of the study were based on cross-sectional, future research could imply longitudinal methodology to better understand relationships between variables. Future research could also focus on other possible relationships between a supportive work environment and quality of care. Future research will need to examine the role of peer group interaction in healthcare organization.

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