



THE IMPACT OF ORGANIZATIONAL CLIMATE ON PUBLIC SERVICE MOTIVATION: A COMPARATIVE ANALYSIS OF PUBLIC AND PRIVATE HOSPITALS IN PAKISTAN

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ABSTRACT:

This research deals with the innovative ideas pertaining to the Public Service Motivation, whereby the human productivity is stirred up through motivation, to boost up the organizational performance. In order to understand the practical implications of the public service motivation this study uses the multi- dimensional construct of Public Service Motivation as a dependent variable, while Organizational Climate is used as an independent variable. For Organizational Climate, The Competing Values Model is used to understand the impact of Organizational Climate on Public Service Motivation. For this research Public and Private sector hospitals in the province of Sindh, Pakistan are used as an Institutional Context to measure the impact of Organizational Climate on Public Service Motivation. Quantitative research method is applied by using the research



questionnaire for main constructs, ie: Organizational Climate (OC) and Public Service Motivation (PSM).

Using cross-sectional study design and questionnaire survey, the data was collected from both public and private hospitals using convenient sampling method ($n= 308$) Data is analyzed through smart PLS. The comparative findings show that organizational climate have (50%), (50.4%) and (71%) variance on public service motivation of combined, private and public hospital group, the internal process and commitment to public interest were not important factors for both public and private hospitals, one more exception is that commitment to public values is found to be not important for public sector hospitals using f^2 effect size. Our research shows the strongest support of the model for public service motivation in hospitals in terms of value of coefficient of determinations (R^2). This research has provided some policy lessons for both public and private hospital administrators.

Keywords: Public Service Motivation, Organizational Climate, PLS SEM, Public Sector, Private Sector, Health Sector.

1. Introduction

Human Capital is directly proportional to the health policies of any nation. Better health ultimately contributes to the socio-economic growth and well overall wellbeing. Pakistan, a South Asian country has a healthcare system which is predominantly in public sector, and doesn't operate efficiently due to numerous reasons such as poor governance, lack resources, non-availability of latest technology, corruption, and lack of monitoring and lack of trained staff, Kurji, Premani and Mitha (2016). These factors make overall picture of health system in Pakistan not very satisfactory.

Although Sindh is the most developed province in the country, its health indicators for are as poor as in other provinces of Pakistan, Mehtab, Zaidi and Mahmood (1999). On the contrary the private sector in Sindh, Pakistan is more innovative, responsive to clients' needs and caters the large number of populations' health needs in Sindh. Almost 80% of health care facilities in Pakistan are provided by the private sector, only 20% are provided by the public sector, Akram & Khan (2007).

Why there is such disparity of service delivery in the province of Sindh? Could it be due levels of Innovations and/ or environment which play a key role in performance and requisite personnel motivation?



This paper examines relevancy of organizational climate on employee motivation, by taking into consideration a policy paradigm referred as Public Service Motivation (PSM). This paradigm determines that, it is a “general, altruistic motivation to serve the interests of a community of people, a state, a nation or humankind “(Rainey & Steinbauer, 1999).

In order to determine the effects of Organizational Climate on Public Service Motivation, the Public and Private Hospitals of the province are Sindh- Pakistan chosen. This research is undertaken to get an insight of public and private sector hospitals in Pakistan, to determine the incidence of organizational climate on public service motivation and draw lessons from public and private sector organizations through comparative analysis.

2. Review of Literature:

Organizational Climate Conceptual Definition

Organizational climate is psychologically oriented climate , regarding creativity, innovation, safety, or service, and founded in the place of work. This climate depicts workers perceptions of organizational policies, practices, and procedures, and consequent forms of behaviors that sustain creativity, innovation, safety, or service in the organization. The main focus of organizational behavior models is related to perceptions of the work environment, referred to generally as ‘organizational climate’ The study of organizational climate is a way to measure the health of an organization. Steinkeet, (2015) argue that organizational climates reflect employees ‘perceptions of the policies, practices and procedures that are expected, supported and rewarded in regard to the human resources of the organization.

Organizational Climate Operational Definition

Litwin (2001), describes organizational climate as “a group of measurable characteristics that members could perceive directly or indirectly in the work environment,” .

There are numerous approaches/models, to determine the organizational climate, however, Competing Value Model of Organizational Climate (Quinn & Rohrbaugh, 1981, 1983; Quinn & McGrath, 1985), is used in this research, to determine its incidence on Public Service Motivation within Public and Private Hospitals in the Province of Sindh- Pakistan.

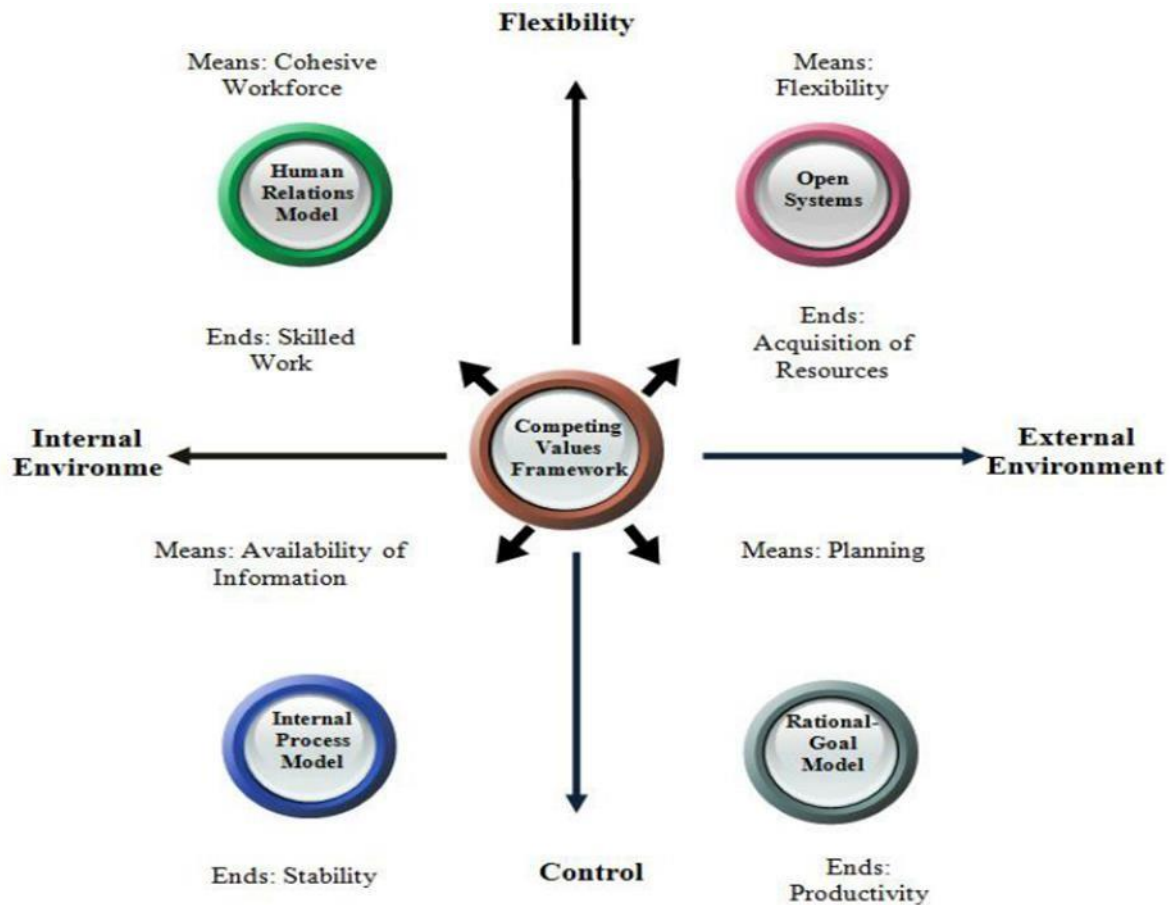


Figure 1: Quinn & Rohrbaugh,(1981). Competing Value Organizational Climate Model

The Competing Value Model is chosen because it is “the dominant framework in the world for assessing Organizational Culture/Climate” Cameron & Quinn, (2011). The Competing Value Model is derivative of management and organizational psychology. The model combines four major approaches of management and organizational psychology categorized as under:

The human relations approach: The human relations approach emphasizes on internal focus and flexibility in relation to the environment. Human Relation approach is driven and human relations schools McGregor, (1960). This approach emphasizes on well-being, of workers in organization. **The open systems approach:** The open system approach



emphasize on flexible relationships with the environment, emphasizes adaptation of the organization in its environment, and subsequent innovation in response to environmental demands Shipper & White, (1983). **The Internal Process Approach:** The Internal process approach highlights, internal focus and tight control within the organizations depict need for formalization and internal control , to utilize resources efficiently. **The Rational Goals Approach** The rational goals approach signifies an economic and rational model of organization in which stress is upon efficiency and goal achievement (Hall, 1980; Clinebell, 1984).

Dimensions of Organizational Climate

Petterson et al (2005) have identified the following dimensions for representing the Quinn's competing model of organizational Climate and its four quadrants, Human Relations, Openness.

Internal Process and Rational Goals.

Table 1: Sub-Construct within the Competing Model for Organizational Climate

Human Relations	Open Systems	Internal Processes	Rational Goals
Employee Well- Being	Flexibility	Formalization	Clarity of Goals
Autonomy	Innovation	Tradition	Effort
Participation	Outward Focus		Efficiency
Integration	Reflexivity		Quality
Supervisory Support			Performance Feedback

• Human Relations

Employee wellbeing, being a component of Human Relations which deals with the extent to which organization gives importance to its employees" (Robinson & Rousseau, 1994; Guest, 1998). **Autonomy** being a component of Human Relations is meant to craft work in a manner that gives employees opportunity to conduct on work their own pace" (Cherns, 1976; Klein, 1991). **Participation** is the component of Human Relations which explains the extent to which the employee is given a part in the decision-making process of organizations, (Hollander & Offer man, 1990), **Integration**, a component of Human Relations tells about the degree of inter- departmental belief and collaboration within organizational structure. (Nauta & Sanders, 2000). **Supervisory support** is the component of Human Relations which defines the degree to which workers receive sympathy from their supervisor (Cummins, 1990).



- **Openness**

Flexibility being component of openness, has an inclination towards change” (King & Anderson, 1995), Innovation, as a component of Openness, reflects the extent of praise and support for new ideas and innovative approaches within the work environment, (West & Farr, 1990); **Outward focus** being component of Openness, focus, on the extent to which the organization is responsive to the needs of the consumer and the market in general (Kiesler & Sproull, (1998), West & Farr, (1990), **Reflexivity**, as a component of Openness concerns with reviewing and reflecting upon objectives, strategies, and work processes, in order to adapt to the wider environment (West, 1996, 2000).

- **Internal Process:**

Formalization being component of Internal Process deals with a concern for formal rules and procedures (Pugh, Hickson,, Hinings, & Turner, 1968). **Tradition**, as a component of Internal Process tells about the extent to which traditional ways of doing things is valued in organizations (Coch & French, 1948).

- **Rational Goals:**

Clarity of Goals, studies provide evidence that individuals working toward well-specified goals performed better than those working with no goals (Dossett, et al; 1979). **Effort** is the component of Rational Goals which tells, how hard people in organizations work towards achieving objectives (McCaol, Hinsz, & McCaol, 1987). **Efficiency**, a component of Rational Goals deals with the amount of importance placed on employee competence and efficiency at work (Ostroff & Schmitt, 1993); **Quality** as being part of Rational Goals, deal with the emphasis given to quality measures (Deming, 1986; Hackman & Wageman, 1995) **Performance feedback**, as part of Rational Goals deals with the measurement and feedback of job performance (Annett, 1969; Kopelmann, 1986).

Public Service Motivation:

Public Service Motivation (PSM), has been considered as one of the most effective tool in many western countries to address issues of maladministration and efficiency. (Brereton & Temple 1999; O'Toole 1993; Rayner et al. 2011). Many studies were conducted in Korea (Kim, 2005; 2006) and in China (Li, 2008; Bangcheng, 2009; Liu, Tang, & Zhu, 2008). The scholars in US and Europe have started research about the concept of public service



motivation, and its desired values of (altruism, benevolence, and morality) (Perry, & Wise 1990, Rainey, 1982).

Public service motivation is individuals' orientation toward delivering services to people with a purpose to do good for others and society. This implies that public service motivation has great potential for contributing to better public service delivery; however, it depends on factors such as governance context. Bøgh, Anne and Kjeldsen, (2020). Motivation in organizations is determined by work environment (Perry, 2000). The important link between public service motivation for employee performance was further reinforced by Taylor (2008), and Belle (2012)

Conceptual Definition of Public Service Motivation:

According to, Vandenabeele (2007), defines public service motivation as “ belief, values and attitudes that go beyond self- interest and organizational interest, that concern the interest of a larger political entity and that motivate individuals to act accordingly, whenever appropriate” (p547).

Operational Definition of Public Service Motivation and its Dimensions:

The first group of studies focuses on the rewards of employees to measure public service motivation (Crewson, 1997; 1964; Rainey, 1982). Second group of studies (Moynihan & Pandey, 2007; Perry, 1996; Vandenabeele, 2008, 2010) have considered PSM as a multidimensional construct.

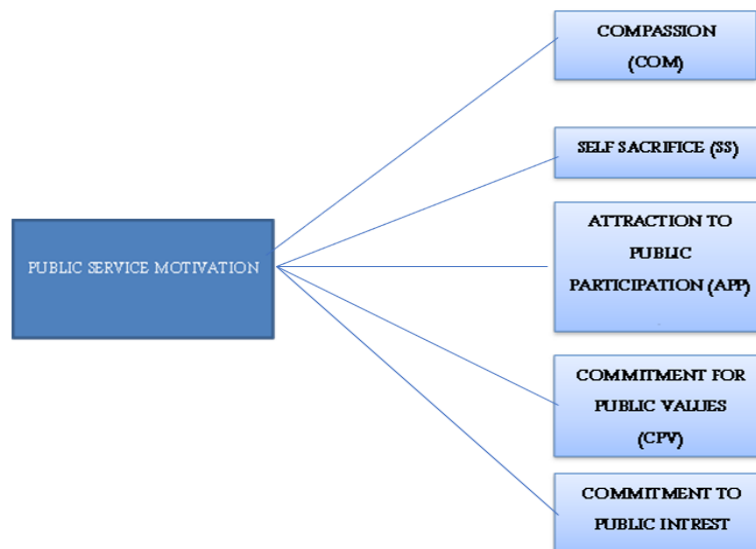


Figure 2: Public Service Motivation constructs (Kim- Vandenabeele 2010)

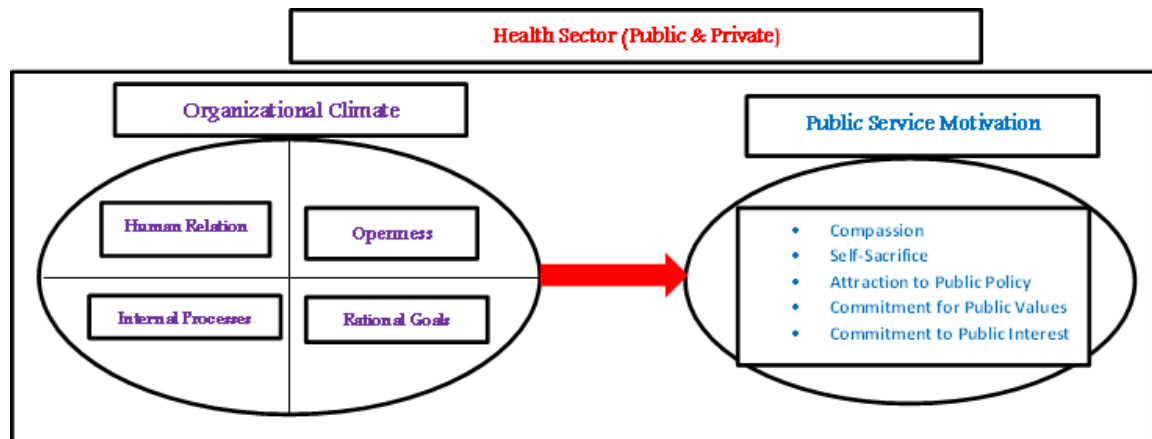


Figure 3: Converged Framework for Research

The following research questions are developed after going through literature review:
Research Questions:

1. What is the Impact of Organizational Climate on the Public Service Motivation in Public Sector Hospitals?
2. What is the Impact of Organizational Climate on Public Service Motivation in Private Sector Hospitals?
3. Does the Organizational Climate have different impact on Public and Private Hospitals in terms of Public Service Motivation?

Research Objectives:

1. To Examine the Impact of Human Relations on PSM in Public & Private Hospitals
2. To Investigate Impact Openness on PSM in Public & Private Hospitals
3. To Analyze the Impact of Internal processes on PSM in Public & Private Hospitals
4. To Evaluate the Impact of Rational Goals on PMS in Public & Private Hospitals
5. To Measure the variation of Organizational Climate on Public Service Motivation in Public and Private Hospitals.

The following hypotheses are developed for this study:



Hypotheses

- H1 : Human Relations have positive effect on PSM (Attraction to public participation, commitment to public values, commitment to public interest compassion, self-sacrifice) in Public & Private Hospitals.**
- H2: Openness have positive relationship with PSM (Attraction to public participation, commitment to public values, commitment to public interest compassion, self-sacrifice) in Public & Private Hospitals.**
- H3: Internal Processes have positive effect on PSM (Attraction to public participation, commitment to public values, compassion, self-sacrifice) in Public & Private Hospitals.**
- H4: Rational Goals have positive relationship with PSM (Attraction to public participation, commitment to public values, compassion, self-sacrifice) in Public & Private Hospitals**

Research Methods

This research was conducted during COVID-19, and it provided interesting opportunity to study the public service motivation and organizational climate of public and private hospitals in Pakistan, therefore, we chose survey method to collect the data and using cross sectional study design; the first stage was to pilot test the questionnaire using confirmatory factor analysis and the results returned were satisfactory, however, questions with unsatisfactory loadings were reworded and modified. The 7-point Likert scale was used from strongly agreed to strongly disagree. The questionnaire contained instructions on how to fill up the questionnaire and confidentiality statement.

Research Instrument/ Questionnaire

Survey method is used for this research paper and Likert's seven scale is used to collect the data. The Questionnaire is adopted from Kim and Vandenabeele, (2010), which is amended version of Perry's Questionnaire (1996) for Public Service Motivation. While Questionnaire on Organizational Climate is adopted from the Patterson's Model (2005), which have filtered the measurable variables from the Competing Values Framework of Organizational Climate by Quinn & Rohrbaugh (1981).

Data Collection/ Sampling

Total of 500 questionnaires were distributed amongst the general physicians, across public and private hospitals in Sindh, Pakistan. During times of pandemic and due to frequent lockdowns, it was not possible to physically visit the hospitals, therefore, hospitals were given online version of the questionnaire and few questionnaires were distributed



physically as well , the total of 308 questionnaires out of 500, were returned and analyzed using partial least square structural equation modeling in Smart PLS 3.3.

Table No 2: Distribution of Questionnaires

S.No.	Name of Hospital	City	Distributed	Returned
1	Civil Hospital Hyderabad	Hyderabad	43	28
2	Civil Hospital Hyderabad	Karachi	45	25
3	Isra Hospital	Hyderabad	45	23
4	Hilal Ahmed	Hyderabad	40	27
5	Abbasi Shaheed	Karachi	43	31
6	Bone Care	Hyderabad	35	28
7	PPHI	Hyderabad	33	22
8	Saint Elizbeth Hospital	Hyderabad	24	17
9	Government Hospital	Kotri	15	6
10	Rajputana Hospital	Hyderabad	18	14
11	Government Hospital	Mirpurkhas	35	20
12	Mae Jee Hospital	Hyderabad	45	20
13	Holy Family Hospital	Karachi	40	23
14	Government Hospital	Hala	39	24
		Total	500	308

4. Results and Discussion

To determine the results based on two group of hospitals i.e. public and private hospitals in Sindh- Pakistan, we have used Smart PLS 3.3, this is best tool available to see latent variable connections based on their indicators and other latent variables, PLS-SEM can handle factor based and composite based models in order to measure constructs of the model. In the figure 3 two groups are generated i.e public and private hospitals and the model is specified as higher order constructs of public service motivation and organizational climate.

Measurement Model

The data was analyzed in Smart PLS using PLS-Algorithm, pls algorithm is used until results are stabilized and parameters are selected for stopping criterion, the stabilization is reached when the sum of outer weights reached a predefined level, the maximum iterations selected for pls algorithm is 5000 times and the literature recommends maximum iterations should be greater than 300 (Hair et al., 2021). The next step is evaluating the measurement model of the model as specified earlier since our model is reflective the evaluation involve internal consistency (composite reliability), indicator or item reliability, convergent



validity using average variance extracted (AVE) and discriminant validity. Our model has lower order and higher order constructs the same criteria is used to evaluate the constructs. The most appropriate measure to evaluate internal consistency is composite reliability, since Cronbach alpha is sensitive to number of items, the composite reliability is computed through outer loadings of the of the indicator variables (Hair et al., 2014), composite reliability values varies between 0-1 and interpreted in the same manner as Cronbach's Alpha, the values between 0.70-0.90 are generally accepted in more advanced stage of research (Nunally & Bernstein, 1994).

Table 3: Construct Reliability

Lower Order Constructs	Cronbach's Alpha	ρ_A	CR	AVE
Attraction to Public Participation	0.721	1.005	0.912	0.765
Commitment to Public Interest	0.811	0.813	0.888	0.725
Commitment to public values	0.963	0.981	0.87	0.823
Human Relations	0.962	0.966	0.766	0.723
Internal Process	0.84	0.857	0.893	0.677
Openness	0.923	0.963	0.737	0.712
Rational Goals	0.861	0.949	0.846	0.433
Self-Sacrifice	0.95	0.957	0.759	0.769
compassion	0.958	0.961	0.867	0.855
Higher Order Constructs	Cronbach's Alpha	ρ_A	CR	AVE
Public Service Motivation	0.812	1.005	0.766	0.544
Organizational Climate	0.671	0.813	0.870	0.585

The composite reliability of the lower and higher order constructs is found between 0.70 to 0.90 except one constructs i.e Attraction to Public Participation which is (0.912) slightly larger than the recommended value of 0.90. The convergent validity measures the level of correlations with alternative level of the same constructs and it is measured through average variance extracted (AVE), the indicator reliability is also part of convergent validity which is measured through outer loadings, the rule of thumb to achieve sufficient indicator reliability is the values of outer loadings should be greater than (0.708), as we can see in the Table outer loadings of indicators is greater than (0.708) which indicates sufficient indicator reliability.

The latent variables should explain sufficiently large of part of its indicators usually greater than 50% as computed through average variance extracted or AVE (Hair et al.,



2014), all lower order constructs have AVE >50% however, small AVE of higher order constructs is observed (0.444) and (0.485).

Another criterion to assess the model is the discriminant validity, it measures how other constructs are truly distinct from other constructs through empirical standards, this means the constructs measures the same phenomena as intended. There are three methods to assess the discriminant validity first by examining the cross loadings of the indicators, second, We have assessed discriminant validity through HTMT ratio which has become popular measure of discriminant validity (Hair et al., 2014).

Table 4: Heterotrait-Monotrait Ratio (HTMT)

	APP	CPI	CPV	HR	IP	Openness	Rational Goals	Self-Sacrifice
Attraction to Public Participation (APP)								
Commitment to Public Interest (CPI)	0.099							
Commitment to Public values (CPV)	0.133	0.224						
Human Resource (HR)	0.179	0.25	0.073					
Internal Process(IP)	0.118	0.432	0.14	0.214				
Openness	0.213	0.142	0.112	0.115	0.096			
Rational Goals (RG)	0.189	0.106	0.173	0.161	0.121	0.262		
Self-Sacrifice (SS)	0.3	0.162	0.116	0.122	0.115	0.071	0.124	
Compassion (Comp)	0.113	0.224	0.069	0.282	0.087	0.255	0.172	0.302

Table 5: Fornell-Larcker (1981)

	APP	CPI	CPV	Comp	HR	IP	Openness	RG	SS
Attraction to Public Participation (APP)	0.865								
Commitment to Public Interest (CPI)	-0.064	0.806							
Commitment to Public values (CPV)	0.271	-0.028	0.773						
Compassion (Comp)	0.5	-0.131	0.215	0.906					
Human Resource (HR)	0.471	-0.098	0.224	0.583	0.858				
Internal Process (IP)	0.05	0.181	0.034	0.116	0.096	1			
Openness	0.467	-0.062	0.188	0.522	0.525	0.148	0.856		
Rational Goals (RG)	0.411	-0.088	0.109	0.443	0.431	0.049	0.485	0.739	
Self-Sacrifice (SS)	0.455	-0.107	0.227	0.65	0.609	0.089	0.452	0.45	0.888



Table 6: Outer Loadings	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)
APP_1 <- APP	0.891	0.891	0.012
APP_2 <- APP	0.900	0.900	0.010
APP_3 <- APP	0.863	0.863	0.022
APP_4 <- APP	0.727	-0.725	0.039
APP_5 <- APP	0.890	0.890	0.012
APP_6 <- APP	0.907	0.908	0.010
COMP_1 <- Comp	0.910	0.909	0.009
COMP_2 <- Comp	0.897	0.897	0.010
COMP_3 <- Comp	0.909	0.909	0.010
COMP_4 <- Comp	0.908	0.908	0.009
COMP_5 <- Comp	0.905	0.905	0.011
CPI_1 <- CPI	0.642	0.128	0.631
CPI_2 <- CPI	0.896	0.046	0.873
CPI_3 <- CPI	0.857	0.039	0.839
CPV_1 <- CPV	0.798	0.802	0.051
CPV_2 <- CPV	0.799	0.803	0.051
CPV_3 <- CPV	0.798	0.777	0.101
CPV_4 <- CPV	0.815	0.795	0.098
CPV_5 <- CPV	0.785	0.766	0.099
CPV_6 <- CPV	0.765	0.745	0.100
CPV_7 <- CPV	0.638	0.620	0.096
HR_1 <- Human Resource	0.861	0.860	0.016
HR_10 <- Human Resource	0.838	0.838	0.019
HR_2 <- Human Resource	0.863	0.863	0.013
HR_3 <- Human Resource	0.880	0.880	0.012
HR_4 <- Human Resource	0.864	0.863	0.015
HR_5 <- Human Resource	0.880	0.880	0.011
HR_6 <- Human Resource	0.857	0.857	0.014
HR_7 <- Human Resource	0.857	0.857	0.012
HR_8 <- Human Resource	0.851	0.851	0.016
HR_9 <- Human Resource	0.831	0.830	0.020
IP_3 <- Internal Process	1.000	1.000	0.000



OPEN_1 <- Openness	0.849	0.849	0.015
OPEN_2 <- Openness	0.878	0.879	0.012
OPEN_3 <- Openness	0.857	0.857	0.017
OPEN_4 <- Openness	0.840	0.840	0.020
RG_1 <- Rational Goals	0.682	0.681	0.046
RG_2 <- Rational Goals	0.684	0.683	0.051
RG_3 <- Rational Goals	0.785	0.784	0.034
RG_4 <- Rational Goals	0.798	0.798	0.031
SS_1 <- Self Sacrifice	0.868	0.868	0.015
SS_2 <- Self Sacrifice	0.877	0.877	0.015
SS_3 <- Self Sacrifice	0.893	0.893	0.010
SS_4 <- SS Self Sacrifice	0.885	0.885	0.012
SS_5 <- SS Self Sacrifice	0.896	0.896	0.012
SS_6 <- SS Self Sacrifice	0.910	0.910	0.009

The indicator reliability is shown through outer loadings, the literature suggests values should be greater 0.708; however, indicators in the range of 0.40-0.70 should only be removed if these indicators increase the average variance extracted and composite reliability (Hair et al., 2014). We have retained those indicators where composite reliability and average variance extracted increases. See Table 6 outer loadings.

The criteria to evaluate discriminant validity through HTMT ratio is values of HTMT ratio should be <0.08., since all our constructs have values <0.08, hence it establishes the discriminant validity of the respective constructs. The more conservative criterial to assess the discriminant validity is through Fornell-Larcker criterion it compares the square root of average variance extracted with latent variable score, thus each constructs square root should be greater than its highest correlations of any other constructs or the values at the diagonal should be greater 0.708 to establish the discriminant validity, our table shows all constructs values at the diagonal are greater 0.708 thus establishing discriminant validity of all constructs.

Structural Model

After establishing measurement model, the next step is to assess the structural model, the steps of structural model evaluation are coefficient of determination R^2 or variance analysis, predictive relevance (Q^2), effect size (f^2) (Hair et al., 2014). In this model lower order constructs are treated as indicators of higher order constructs i.e Public Service



Motivation and Organizational Climate of public and private hospitals in the province of Sindh- Pakistan.

Table 7: Comparative variance Analysis (R^2)

	All		Private Hospitals		Public Hospitals	
	R^2	P Values	R^2	P Values	R^2	P Values
APP	0.578	0.000	0.491	0.000	0.626	0.000
CPI	0.034	0.207	0.013	0.746	0.096	0.194
CPV	0.179	0.000	0.224	0.001	0.129	0.078
Compassion	0.734	0.000	0.741	0.000	0.723	0.000
Human Resource	0.692	0.000	0.670	0.000	0.684	0.000
Internal Process	0.041	0.275	0.000	0.996	0.052	0.435
Openness	0.678	0.000	0.567	0.000	0.749	0.000
Public Service Motivation	0.563	0.000	0.504	0.000	0.701	0.000
Rational Goals	0.566	0.000	0.486	0.000	0.618	0.000
Self-Sacrifice	0.700	0.000	0.660	0.000	0.681	0.000

The most important measure to evaluate the PLS-SEM path model the variance or coefficient to determination (R^2) and it measures the predictive accuracy which is calculated to assess the effect of endogenous construct's on exogenous variable, this value ranges from 0 to 1. The values of 0.20 are considered high in the discipline of consumer behavior; while in marketing research the rule of thumb is to evaluate weak, substantial, and strong values such as 0.25, 0.50 and 0.75 (Hair, Ringle, & Sarstedt, 2011; Henseler et al., 2009). Keeping in view the above rule of thumb the variable of concerns are primarily the effect of organizational climate on public service motivation which is substantial for all combined groups ($R^2=0.563$), for private hospitals it is ($R^2=0.504$) and for public hospitals it is strong ($R^2=0.71$). So comparatively our research shows that more variance on public service motivation is explained by public service hospitals than combined and private hospitals.

Table 8: f^2 effect Size (f^2)

	Combined		Private Hospitals		Public Hospitals	
	f^2	P Values	f^2	P Values	f^2	P Values
OC -> Human Resource	2.243	0.000	2.035	0.000	2.162	0.010
OC -> Internal Process	0.043	0.329	0.000	0.997	0.054	0.524
OC -> Openness	2.110	0.000	1.309	0.002	2.985	0.000
OC PSM	1.286	0.000	1.017	0.006	2.340	0.003
OC -> Rational Goals	1.307	0.000	0.946	0.004	1.614	0.002
PSM -> APP	1.368	0.000	0.966	0.002	1.677	0.003
PSM -> CPI	0.035	0.247	0.013	0.783	0.106	0.306
PSM -> CPV	0.219	0.001	0.289	0.021	0.148	0.215
PSM -> Compassion	2.766	0.000	2.856	0.000	2.616	0.000
PSM -> Self-Sacrifice	2.334	0.000	1.943	0.001	2.138	0.010

In addition to coefficient of determination or variance, f^2 effect size to assess whether omission of constructs lead to any substantial effect on endogenous constructs, the values 0.02, 0.15, and 0.35 represent the small, moderate and strong effect of the exogenous construct on endogenous construct (Cohen, 1988).

Combined, private and public hospitals f^2 effect size on organizational climate and public service motivation shows that human resource, openness are important factors, while f^2 effect of organizational climate to public service motivation, regarding rational goals, attraction to public participation, commitment to public values, compassion and self sacrifice are statistically significant p -values <0.05 . While internal process, commitment to public interest are statistically not significant on their respective higher order constructs p -values >0.05 . One exception is commitment to public values which is not statistically significant on their higher order construct thus p -values >0.05 . All constructs have small f^2 effect on their respective higher order constructs.

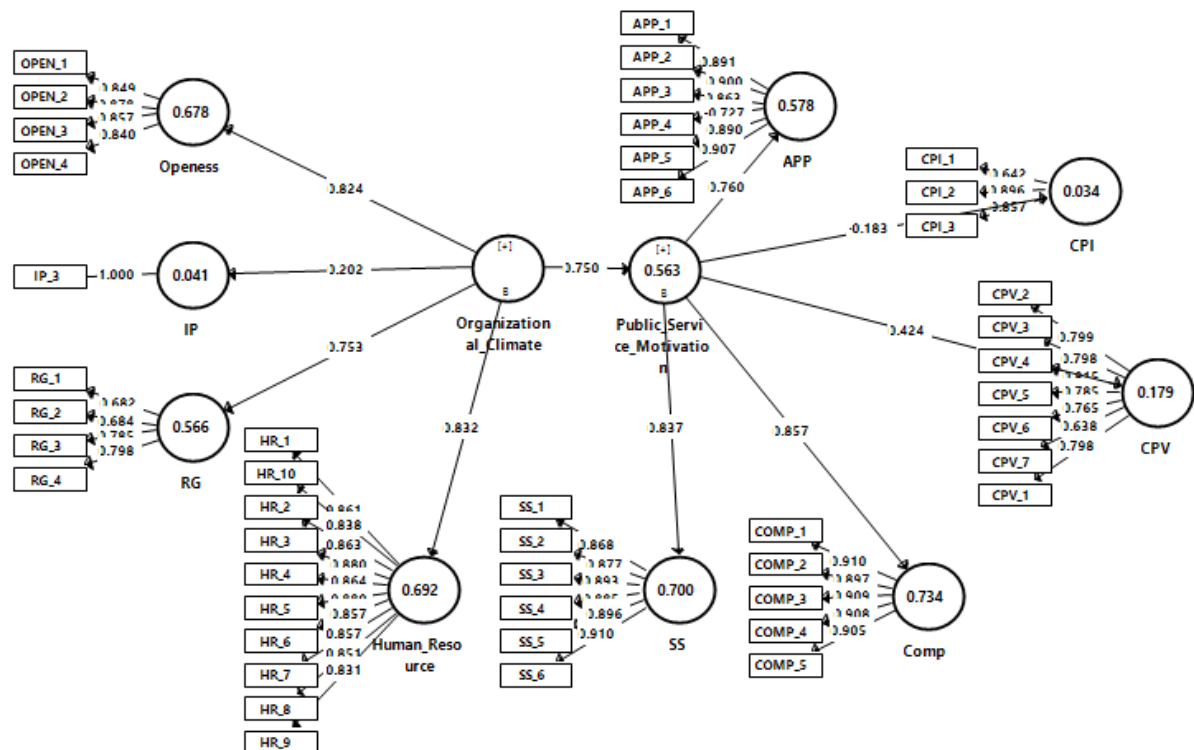


Figure 4: PLS-Algorithm path diagram (Combined)

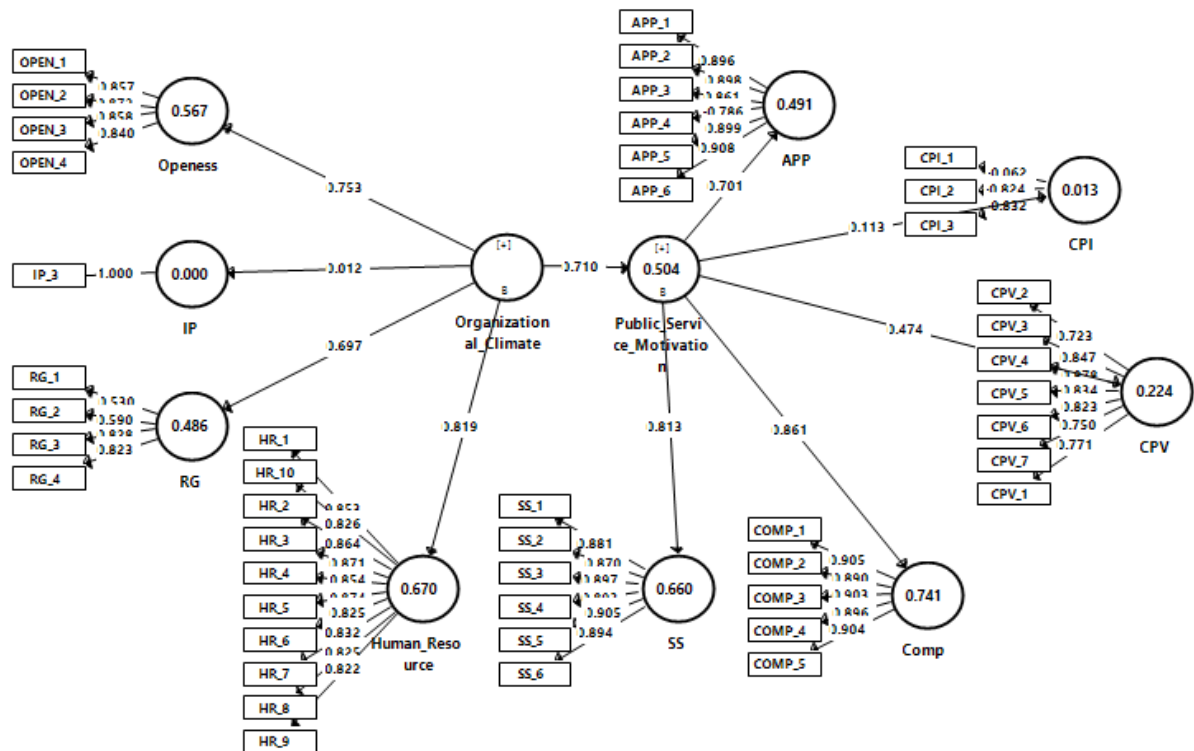


Figure 5: PLS-Algorithm path diagram (Private)

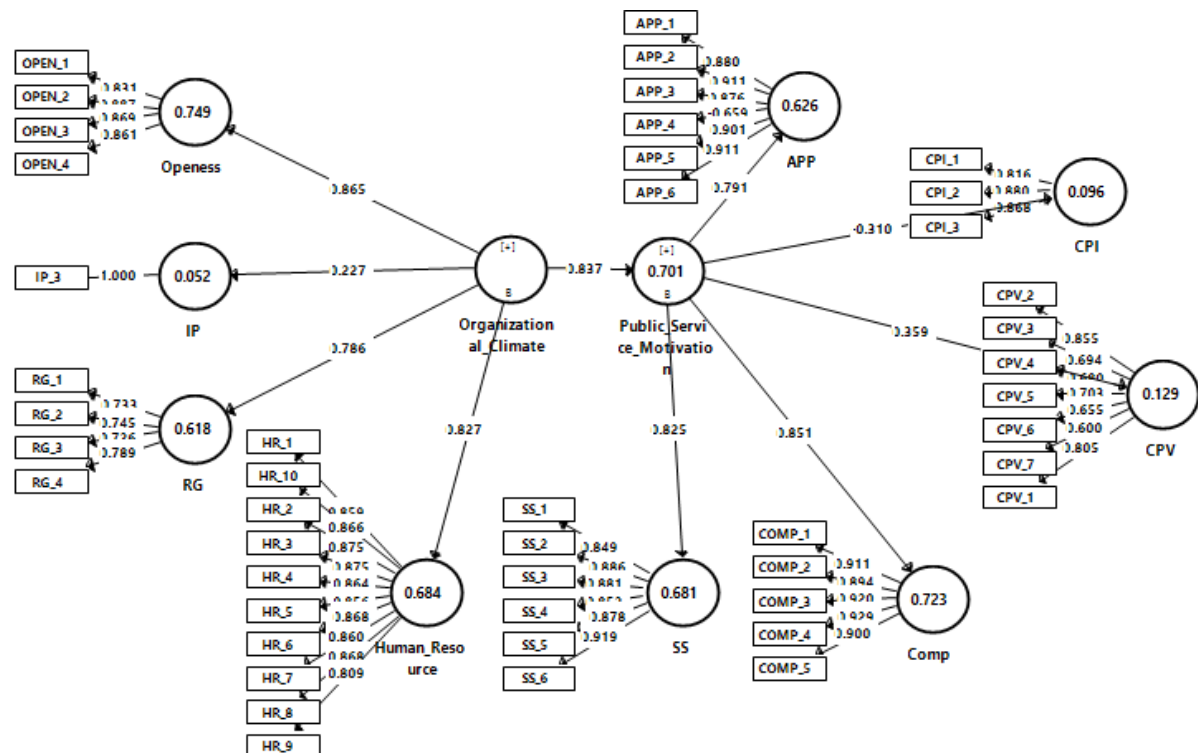


Figure 6: PLS-Algorithm path diagram (Public)

Blindfolding

The blindfolding procedure in SmartPLS was run to compute the magnitude of Q^2 which is the measure of predictive relevance; the researchers should also examine Stone-Geisser's Q^2 value (Geisser, 1974; Stone, 1974). The Q^2 values larger than zero for a reflective endogenous latent variable indicate the model's predictive relevance independent construct. Q^2 value obtained through blindfolding procedure for combined (0.19), private hospitals (0.145) and public hospitals (0.223), which is greater than zero, and it shows predictive relevance of organizational climate on public service motivation (Hair et al., 2014). Highest value obtained of Q^2 value is of public hospitals (0.223) followed by all combined (0.19) and smallest is of private hospitals (0.145) See Table 10 Q^2 Predictive relevance.

Bootstrapping (Hypotheses Testing)

Bootstrapping procedure was run to estimate the p values and test the hypotheses with 5000 sub samples (Total sample size 308), the primary interest constructs are effect of organizational climate on public service motivation the relationship is significant (p-



values=0), all lower order variables are significant on their respective higher order constructs i.e organizational climate and public service motivation except commitment to public interest and public service motivation.

Table 9: Bootstrapping results

	All		Private Hospitals		Public Hospitals	
	Original Sample (O)	P Values	Original Sample (O)	P Values	Original Sample (O)	P Values
Organizational Climate -> Human Resource	0.832	0.000	0.819	0.000	0.827	0.000
Organizational Climate -> Internal Process	0.202	0.027	0.012	0.937	0.227	0.121
Organizational Climate -> openness	0.824	0.000	0.753	0.000	0.865	0.000
Organizational Climate -> Public Service Motivation	0.750	0.000	0.710	0.000	0.837	0.000
Organizational Climate -> Rational Goals	0.753	0.000	0.697	0.000	0.786	0.000
Public Service Motivation -> APP	0.760	0.000	0.701	0.000	0.791	0.000
Public Service Motivation -> CPI	-0.183	0.390	0.113	0.456	-0.310	0.242
Public Service Motivation -> CPV	0.424	0.000	0.474	0.000	0.359	0.000
Public Service Motivation -> Compassion	0.857	0.000	0.861	0.000	0.851	0.000
Public Service Motivation -> Self- Sacrifice	0.837	0.000	0.813	0.000	0.825	0.000

Table 10: Q2 Predictive relevance	SSO	SSE	Q ² (=1-SSE/SSO)	SSO	SSE	Q ² (=1-SSE/SSO)	SSO	SSE	Q ² (=1-SSE/SSO)
Attraction to Public Participation	1848.000	1083.091	0.414	900.000	615.464	0.316	564.000	315.631	0.440
Commitment to Public values	924.000	908.854	0.016	450.000	453.746	-0.008	282.000	267.699	0.051
Commitment to Public Interest	2156.000	2013.424	0.066	1050.000	962.278	0.084	658.000	648.066	0.015
Compassion	1540.000	639.298	0.585	750.000	341.534	0.545	470.000	201.453	0.571
Human Resource	3080.000	1553.276	0.496	1500.000	879.526	0.414	940.000	482.228	0.487
Internal Process	308.000	302.659	0.017	150.000	154.415	-0.029	94.000	91.942	0.022
Openness	1232.000	643.631	0.478	600.000	386.818	0.355	376.000	175.373	0.534
Organizational Climate	5852.000	5852.000		2850.000	2850.000		1786.000	1786.000	
Public Service Motivation	8316.000	6736.657	0.190	4050.000	3462.879	0.145	2538.000	1972.303	0.223
Rational Goals	1232.000	874.914	0.290	600.000	487.594	0.187	376.000	260.029	0.308
Self-Sacrifice	1848.000	859.303	0.535	900.000	489.905	0.456	564.000	281.939	0.500

The comparative bootstrapping results show that there is no statistically significant relationship between public service motivation and commitment to public interest p-value(0.390,0.456,0.242), combined results show that there is statistically significant relationship between internal process and organizational climate p-value(0.00), while public and private hospitals individually show not significant results between internal process and organizational climate p-value(0.937, 0.121). while rest of the relationship are statistically significant on their relevant higher order constructs such as human resources,



openness, rational goals, self-sacrifice, commitment to public values, attraction to public policy and compassion.

VI Conclusion:

The data of general physicians (GP) , was collected from the public and private hospitals in the province of Sindh, Pakistan. The Competing Values Model, developed by Quinn & Rohrbaugh, (1981), is used for the organizational climate, and for public service motivation a construct given by Kim & Vandenabeele (2010), is used as higher models, to assess the impact of organizational climate on public service motivation. The higher order model was formulated and tested in Smart PLS using PLS-SEM. PLS-SEM calls for testing and evaluating measurement model or measurement theory and structural model or the relationship between constructs. The measurement model yielded satisfactory results at lower and higher order level and structural model was found to be satisfactory.

Our research has shown that most important and significant factors for combined private and public hospitals are attraction to public participation, human resources, openness, rational goals, compassion and self-sacrifice, the internal process, commitment to public interest were not important factors for combined, or private and public hospitals. One interesting exception was commitment to public values which was not important factor for public hospitals. Our model showed highest and strong variance of organizational climate on public service motivation from (71%) for public hospitals, to substantial (50.4%) for private hospitals and combined (50.1%).

It is therefore, concluded from the research that the hospitals in public and private sectors, need to improve the organizational climate of their hospitals in order to develop spirit of public service motivation, so that they could better serve the community and cope with natural calamities and pandemics like Covid-19. This research has deep implications for health policies in Sindh- Pakistan, which could be overhauled in order to inculcate the spirit of public service in health officials. Future researchers may extend this model with more variables and larger sample size.



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