



Healthcare Workers Satisfaction Level Using SEHC Framework and Workplace Well-being; A Cross Sectional and Comparative Study of Doctors and Nurses Working in Tertiary Care Hospitals in Karachi City

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ABSTRACT

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Big cities face a chronic challenge of overburdened healthcare resources, adversely affecting healthcare providers' satisfaction and wellbeing. Ensuring the satisfaction of doctors and nurses is critical to delivering quality healthcare services yet remains a significant managerial challenge. The objective of this study is to investigate the impact of the SEHC framework on healthcare workers' satisfaction and wellbeing, exploring differences between doctors and nurses in these aspects. A quantitative, cross-sectional design was employed using a pre-validated SEHC framework and wellbeing measures. A purposive sample of 159 respondents was analysed through Structural Equation Modeling using Smart PLS4 and SPSS. Results reveal a significant relationship between job satisfaction and wellbeing for both doctors and nurses. However, notable differences exist in job content, relationships with managers and peers, and satisfaction levels, although perceived wellbeing is similar across both groups. The findings emphasize the need for policymakers to prioritize relationship management, job content, and the overall wellbeing of healthcare workers to ensure effective service delivery. This study provides a novel contribution by addressing the limited research in Pakistan on the SEHC framework and the disparities between these healthcare roles.

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1.0 Introduction

Job satisfaction is defined as the level of contentment employees feel with their job (Cantarelli et al., 2023). This goes beyond their daily duties to cover satisfaction with team members/managers, satisfaction with organizational policies, and the impact of their job on employees' personal lives (Onofrei et al., 2023; Dieleman, M., & Harnmeijer, et.al 2006). Employees should be satisfied to work efficiently to produce effective outcomes. This is the rule of thumb for every worker of an organization but healthcare worker and their support staff working in hospital setup should be highly encouraged and satisfied (Cantarelli et al., 2023; English et al., 2024) so that they can provide their 100% to deal with human health and can avoid any error which further led to harm their patient. Many factors affect employees by which they become dissatisfied, includes less salary, no promotion, ill-treated by upper management/managers/supervisors, increase workload, decreases relaxation, increase duty hours, limited chance of growth. Most of the time workers get depressed due to their family stress, spouse relationship, children and their issues etc., which is going to be exaggerated by job pressures. In Pakistan prevalence of job satisfaction is 41% (Kumar et al., 2013). While In India prevalence of job satisfaction is 55% (Singh et al., 2019). Job dissatisfaction and job satisfaction among healthcare staff are affected by intrinsic and extrinsic factors of motivation. (Sohag,. 2012). Study did in eastern India emphasizes the Frederick Herzberg two factors having intrinsic-motivation (i.e., recognition, responsibility) and extrinsic-hygiene (i.e., job security, salary and working conditions) factors. When intrinsic factor fulfilled then workers are satisfied and when working place not able to provide extrinsic factor then it adds dissatisfaction in employees (Bhattacharjee et al., 2016). A pilot survey conducted in the United States has validated the SEHC tool which is believed to be a single confirmatory tool for job satisfaction in healthcare workers (Chang et al., 2017). However, there is a need to further investigate the phenomenon in developing countries (François et al., 2024).

1.1 Significance and scope of study

Medical errors, poor quality care to patients, increase mental stress, increase turnovers of doctors and nurses from hospitals, which further affect the quality and reputation of organization, affecting personal life of healthcare workers (Onofrei et al., 2023) . Employee satisfaction and workplace well-being are the most important elements which must be focused on ground level, if any organization needs to improve quality care of their patients as well as reputation of their organization and decreasing their healthcare worker's turn over. Minimum research is found on satisfaction and wellbeing of the healthcare workers in developing countries (François et al., 2024; Cantarelli et al., 2023), and the comparison of the two important specialties is even scarce. This research is specified only to 4 private, tertiary care hospitals of Karachi, Pakistan. This study includes healthcare workers, only Nurses and Doctors having MBBS degree working in private, tertiary care hospital of Karachi, Pakistan. Regardless of their designation and post graduate higher qualifications, Includes House officers, medical officers, Senior Medical officers, Fellows, Consultants, Administrators, Assistant professors, Professors etc.

1.2 Objective of the Study

The primary objective of this study is to investigate the impact of healthcare workers job

satisfaction using the pre-tested and widely used SEHC framework on their workplace well-being. Therefore, as a result the following secondary objective are raised.

a) To investigate the impact of relationships with management and supervisors on the workplace well-being of healthcare workers.

b) To investigate the impact of job content on the workplace well-being of healthcare workers.

c) To investigate the impact of relationships with co-workers on the workplace well-being of healthcare workers.

d) To investigate whether there is a difference between doctors and nurses in Job satisfaction and their perceived workplace well-being.

Similar research questions are formed, and hypotheses are raised to realize the stated research objectives.

2.0 Literature Review

In today's medical workplace, physicians and medical professionals react in various ways. some are satisfied, joyful and more motivated to work, while others are burnt out, strained, and stressed out by an excessive workload (McManus et al. 2004). To provide comfort and hope to patients and their families, the government needs to focus on improving healthcare quality. Health care is a significant contribution to the country's growth since it helps maintain the country's human capital (Irfan & Ijaz, 2011). Research done on healthcare workers shows that for recruiting as well as retaining the healthcare staff depends on job satisfaction and working atmosphere for which healthcare managers and co-workers are key factors of satisfaction. These all determinants in turn have negative effect on patient care delivery which further spoil quality care of hospital and goodwill of organization (Cantarelli et al., 2023, Dieleman, M., & Harnmeijer, J.W. 2006; Goetz et al., 2015; Deriba et al., 2017; Kim et al., 2021; Khan Khuwaja et al., 2010; Imran, 2011; Aiken et al., 2002, Goetz et al., 2011) It has been very beneficial to observe the percentage of job satisfaction and determinants which leads to dissatisfaction among healthcare workers and their support staff. Studies have proven that by continuous observing and making corrective actions, organizations can get better in mental, psychological and social well-being of their staff as well as they can get improvement in their revenue generation (Jaiswal et al., 2015).

2.1 Impact of Health Care System on Workers

Today, an organization's success rests on the ongoing growth and contentment of its workforce, which can only be attained by being more flexible than ever. A motivated and well-trained staff is more likely to be extremely productive, which is essential for any business. The nation's capacity to generate products and services is directly impacted by the health care system. A robust healthcare system cannot exist without highly skilled medical professionals working in hospitals (Hsu & Kernohan, 2006). Researches done on healthcare workers shows that recruiting as well as retaining the healthcare staff depends on job satisfaction and working atmosphere for which healthcare managers and co-workers are key factors of satisfaction.

2.1 Challenges for Health Care Providers

When the globalization wave impacted Pakistani markets, work grew more complex and needed lengthy hours. The nation's officials have had to put in more effort due to its rapid growth. The work itself is become more complicated, even though organizations in Pakistan are now providing great benefits, salary, and wages. This evolution has forced the associations to put in more effort to modernize their operations, boost benefits, and lower expenses to strengthen and maintain their competitive advantage. Employees found it challenging to manage their personal and professional life due to complex technology, demanding occupations, long hours, and large workloads. This circumstance offered a chance to adjust to contemporary human resource management concerns, like work-life conflict. Grievances over working conditions, such as stress and long working hours are significantly contributed to work/family life conflicts.

Because they were forced to become goal-oriented without any autonomy or job security, employees were subjected to heavy workloads and high levels of stress. Scholars from a wide range of fields are now interested in work-life balance techniques due to the growth of high-tech professions and the variety of employment in IT organizations. The purpose of this experiment was to find ways to motivate employees to perform at high levels, improve job satisfaction, and reduce the likelihood of employee turnover (Hannif & et al., 2008, p. 272).

2.2 Job Satisfaction

Job satisfaction prominently affects the patient care delivery, and if it suffers, it can further spoil quality care of hospital and goodwill of organization. (Deshmukh et al., 2023; Dieleman, M., & Harnmeijer, J.W. 2006; Goetz et al., 2015; Deriba et al., 2017; Kim et al., 2021; Khan Khuwaja et al., n.d.; Imran, 2011; Aiken et al., 2002; Goetz et al., 2011). It has been very beneficial to observe the percentage of job satisfaction and determinants which leads to dissatisfaction among healthcare workers and their support staff. Studies have proven that by continuous observing and making corrective actions, organizations can get betterment in mental, psychological and social well-being of their staff as well as improvement in their revenue generation. (Jaiswal et al., 2015). On comparison of physician and non-physician staff, Physician staffs are less satisfied than non-physician staff. It has been importance to keep non-physician staff (practice assistants) well satisfied so that organizational working conditions become fruitful and one can retain both physician and non-physician staff and can improve quality patient care. (Goetz et al., 2011; Goetz, K., et al 2013; Zangaro & Soeken, 2007).

2.2.1 Factors of Job Satisfaction

Job satisfaction of healthcare staff depends on multiple factors including financial and non-financial incentives, work stress, work-family conflict, doctor-patient relationship, number of night shifts monthly and sociodemographic factors. Moreover, higher education levels, higher job opportunities with better salaries and facilities, less the level of satisfaction in limited resource/public sector hospitals where salaries are not on time and other issues as well. Reduction

in workload and stress by balance workload between the employees, balancing work-family conflict and increasing compensation can improve job satisfaction of healthcare workers. (Kim et al., 2021; Lu et al., 2016; Shakir et al., 2007). Along with the above common factors, some contemporary determinants are also responsible for healthcare workers' job satisfaction i.e., internet-based healthcare knowledge, repeatedly used outfits, decline relations with patients, working hours related stress related to affect the job satisfaction. (Bhattacharjee et al., 2016). According to World Health Report 2006, used Satisfaction of Employees in Health Care (SEHC) survey and evaluate the issues of Ethiopian and other low-income countries, furthermore they found the ways to overcome this disaster of healthcare staff shortage. (Alpern et al., 2013).

2.2.2 Doctors' Job Satisfaction Level

It is widely acknowledged that doctors, both in the public and commercial sectors, are under a lot of pressure to perform their jobs. However, only a small number of study evaluations are now available, and little effort has been made to distinguish the factors that affect their working conditions at work. The working classes suffered as the industry profited from computerization and de-skilling. When jobs are outsourced to get a competitive cost advantage, domestic workers' safety is put at risk. Employees were forced to become goal-oriented without any autonomy or job security, which resulted in heavy workloads and high levels of stress.

2.2.3 Consequences of Doctor' Job Dissatisfaction

Many health care organizations have struggled with high levels of doctor departures. Having a shortage of trained doctors may have a negative impact on the health care industry and the profession. Doctor turnover might negatively impact the ability to satisfy patient demands and deliver excellent treatment. In addition, the loss of physicians results in insufficient staffing, which may lower morale and raise stress on stayers,' who are burdened with higher duties, if physicians aren't satisfied with their work, they'll be less productive, and they'll eventually leave the company. Patients may also be less confident if there aren't enough qualified and experienced staff members. "Resources that might be allocated to important company operations, such as quality improvement initiatives, and employee development or Doctor Retention efforts" are drained by doctor turnover. Ninety percent of general practitioners surveyed by Myerson (1991) said that not enough time was the most significant source of their stress. Some of the other stressors were being on-call and dealing with complicated circumstances; night shifts; crucial patient care; disagreements within the group; weakness; absence of opportunity; over-burden of work; better standards; requests; and public condemnation

2.2.4 Nurses' Job Satisfaction Level

Nurses are in short supply worldwide, and many choose to leave their organizations. Nurses' happiness at work is a significant contributor to this occurrence. Nurses are in short supply and many of those who work in the field plan to leave. Job satisfaction is the most important element in a nurse's decision to leave the profession. Several health-related research has

demonstrated that improving employee commitment and minimizing work-family conflict, job stress, role ambiguity, and role conflict may improve job satisfaction (Lu, While & Barriball, 2006).

2.2.5 Consequences of Nurses' Job Dissatisfaction

Nurses' work is also influenced by the work environment, including management practices, interpersonal relationships with coworkers, and educational opportunities. Dissatisfaction may arise from lack of involvement in management choices, lack of credit for their efforts, and lack of respect from the senior management. The work of nurses' and coworkers' experiences has been the subject of conflicting research. Nurses, even those who work with doctors, are generally content in various studies. The low levels of respect, admiration, and support those Saudi Arabian nurses report receiving from their colleagues, particularly doctors, led to a study of their feelings of dissatisfaction. In addition, they experienced inadequate communication and engagement with doctors. The promotion system, access to degree programs, and continuous education have all been shown to influence the work of nurses. From many surveys conducted, nurses expressed dissatisfaction with the security division, which led to fears about workplace safety. As a result, nurses and other healthcare workers are less likely to be satisfied. More than one Saudi Arabian health care study revealed a lack of supplies for patients in primary health care centers (PHCs).

2.3 Workplace Well-Being of Health Care Workers (WWB)

Workplace wellbeing of employees is found to be closely associated with their performance and satisfaction (Okon et al., 2023). A systematic review by... on the HRM practices predicted a stronger link to wellbeing of employees with the quality of work (Qamar et al., 2023). As health-care providers, we must occasionally place the value of a patient's life over the organization's benefit. As a result, workers in many types of health vocations face ongoing physical and emotional stress, raising the risk of early burnout. Poor psychological wellbeing among the healthcare workers produces burnouts leading to increased dissatisfaction level of employees (Bedendo et al., 2023). Doctors work under extreme pressure all around the world, whether in the public or private sectors (Pradhan & Hati, 2022). However, only a small number of research evaluations are now available, and little effort has been made to identify the factors that affect their working conditions. The development of computer technology and de-skilling boosted the industrial sector, but at the expense of the working classes. Outsourcing jobs to get competitive cost advantages puts domestic workers at risk.

2.4 Job Content (JC) and satisfaction

Job content are the elements controlled by the individual oneself like performance, recognition, autonomy etc. Job content factors are directly related to worker's job. Every person needs all content in the workplace. Doctors ask about autonomy and recognition in hospitals for better career startup (Fouri et al., 2024; Patil & Shankar, 2023; Spierings et al., 2024). The workplace is a major contributing factor (National Social Insurance Board, 2003; Theorell, 2006).

With about 10,000 students graduating annually from medical institutions spread across Pakistan's five provinces, the medical field is among the most respected in the country. Nonetheless, several unfavourable patterns have surfaced recently, such as students quitting the field or departing to serve abroad (a process referred to as "brain drain"). Although stress in the workplace cannot be completely eliminated, it can be effectively managed and reduced if its causes are recognized (Imtiaz & Ahmad, n.d.).

It's not just enterprises all over the globe that are grappling with the problem of individual job performance; research in management, occupational health, and work and organizational psychology has been developing in tandem. There has been a slew of investigations on the performance of the job of specific individuals "(Viswesvaran & Ones, 2000)". Still, numerous ways of breaking down individual work execution have large amounts of contemporary exploration. Instead of focusing on maximizing an employee's productivity, the area of management has devoted more attention to how to minimize productivity losses caused by illness or other health issues (Vandewalle, 1995). On the other hand, work and organizational psychologists have an interest in the impact of variables including position commitment, fulfillment, and character on individual work performance. In a similar vein, job satisfaction is greatly impacted by the job content among healthcare professionals (Kang & Malvaso, 2023). Therefore, it can be hypothesized that,

H1: There is an impact of job content on the employees' perceived well-being among the healthcare workers.

2.5 Promotion

A few laborers favor equity at work, a few like advantages provided by their boss, or others are satisfied with how much they have the position to take the drives at their work environment the job. Promotion in the medical field will be examined in this study to see how it affects physicians' work. Performance. Promotion is worker recognized efforts and his dedication to work "(Borman & Motowidlo, 1993)". Getting increasingly high advancement is a definitive target of any laborer working in any type of firm. Promotion is moving a person to a position with more responsibility and financial reward. An employee's advancement in the company's hierarchy, which is often accompanied by an increase in responsibility and rank and an increase in income, is known as a promotion "(Koopmans et al., 2011)".

2.6 Relationship with Coworker (RWC) and job satisfaction

Cozens (2003) found that doctors were 28 percent more likely than the working population as a whole to be experiencing stress levels over the threshold. Stress at work has a detrimental effect on one's health. Co-workers' relationship is found to be a strong predictor of job satisfaction (Heriyanto et al., 2023). The unhealthy co-worker's relationship may produce much adverse outcomes in the healthcare setting (Lo et al., 2023). In addition to long hours and massive workloads, a lack of time to connect with colleagues, a lack of financial pressure (wage, insurance concerns, etc.), dissatisfied results, and delayed satisfaction are cited as some of the factors that

contribute to burnout (Anon., 2009). Physicians and surgeons have often expressed dissatisfaction with their jobs and the possibility of quitting their jobs altogether due to weak communication among coworkers that causes their high anxiety levels (Anthony, 2001).

H2: There is an impact of relationship with co-workers on the employees' perceived well-being among the healthcare workers.

2.7 Relationship with Supervisor and Management and job satisfaction

Like other factors, the relationship between supervisor and management staff must show vital role. Management must give many new job skills in this position and offer suggestions and improvements. The management makes changes based on the workers' suggestions and feedback. Study done in India found a stronger link between relationship of peers and management, job content and satisfaction of healthcare workers in tertiary care hospitals (Deshmukh et al., 2023). The perceived support from supervisors produces positive work outcomes (Hwang et al., 2024) that may lead to much satisfied healthcare workers.

Supervisors should develop a fair system of performance evaluation. Moreover, institutional infrastructure and ergonomics have a vital effect on doctors' Performance and QWL. The South African Human Rights Commission (SAHRC, 2000) agrees, emphasizing the need of good infrastructure, such as power, water supply, and fully functional communication systems. They also emphasized the importance of providing enough space and public amenities in hospital facilities in order to deliver better health care. In the similar vein Zambelli et al., (2024) consider the relation as a life and job satisfaction predictors.

H3: There is an impact of relationships with management and supervisors on the employees' perceived well-being among the healthcare workers.

2.8 SEHC Tool

US conducted pilot survey to validate the SEHC tool which is believed a single confirmatory tool for job satisfaction in healthcare workers (Chang et al., 2017) According to World Health Report 2006, Ethiopia was one of the 57 countries who faced severe shortage of healthcare workers. To find the cause of this scarcity Ethiopian Federal Ministry of Health with the help of used Satisfaction of Employees in Health Care (SEHC) survey and evaluates the issues of Ethiopian and other low-income countries. Furthermore, they found ways to overcome this disaster of healthcare staff shortage. SEHC survey tool has been used ubiquitously. Regardless of this, SEHS is not used in any of the research conducted in Pakistan. Reason of choosing this tool is to fill this gap and find out the responses of Pakistani healthcare workers (doctors and nurses) and the Pakistani context and testing the impact of satisfaction on the workplace wellbeing of healthcare workers.

2.9 Healthcare workers' wellbeing and job satisfaction

Physicians' wellbeing is greatly hurdled by the burnout leading to dissatisfaction at workplace and poor health (Bedendo et al., 2023; Rizwan et al., 2023). Mental welling and job satisfaction closely linked in the Adolescent Healthcare Services in England (Mareva et al., 2024). The past and contemporary literature such as (Mareva et al., 2024; Zambelli et al., 2024) places great emphasis on on wellbeing of workers and their satisfaction. It is therefore pertinent to hypothesize that the important job satisfaction aspects as discussed above are important predictors of job satisfaction among doctors and nurses. Moreover, there is a need to test whether there exists any difference in wellbeing and satisfaction aspects among the two important specialties of healthcare. The following are developed based on the literature discussed above.

H4: There is a difference between doctors and nurses regarding their perceived workplace well-being

H5: There is a significant difference between doctors and nurses regarding their job satisfaction related to relationship with management and supervisors.

H6: There is a significant difference between doctors and nurses regarding their job satisfaction related to job content.

H7: There is a significant difference between doctors and nurses regarding their job satisfaction related to relationship with co-workers.

Research Framework

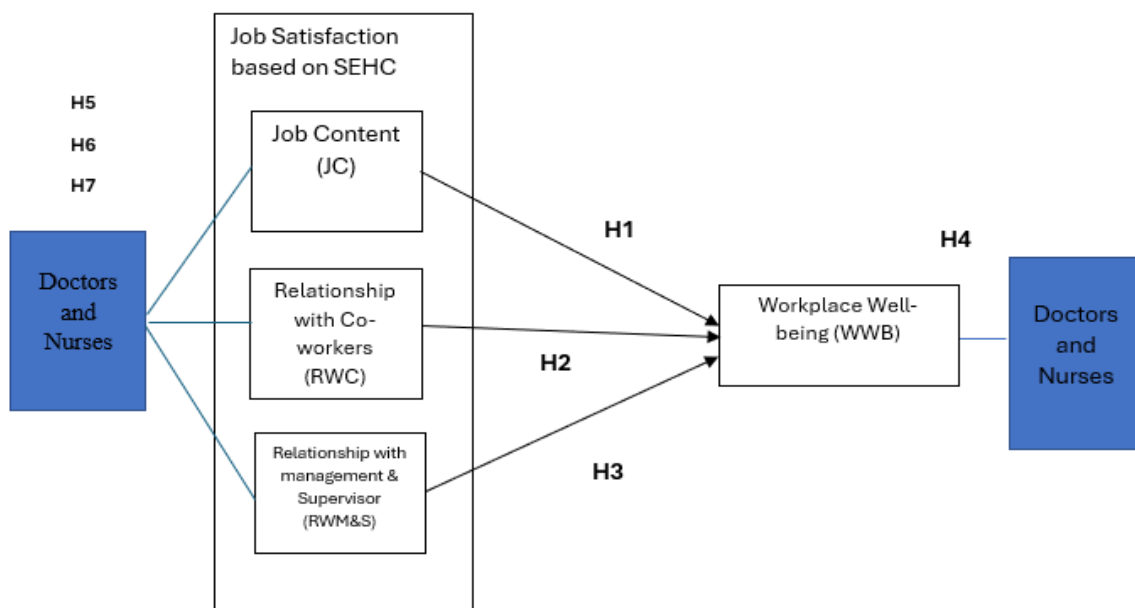


Fig 2.1: Research Framework

3.0 Methodology

For research methodology, Saunders onion model is used, which helps to work in a systemic manner (Melnikovas, 2018). A quantitative research design is used that addresses research objectives through empirical assessments that involve numerical measurement and analysis. (Zikmund, 2013). The purpose of choosing a quantitative type of study is to add some novelty and fill the gap of quantitative work. Because a huge work has been done ubiquitously as qualitative nature so that a causal relationship inferences to be made (Zikmund, 2013). A cross-section time order is utilized for causal relationships between healthcare workers (doctors and nurses) with their job satisfaction. Structural Equation Modelling (SEM) is used to test the relationship between the latent constructs, using Smart PLS 4. SPSS is used to test the difference with the population of doctors and nurses using independent sample t-test.

3.1 Study Population and Settings

Healthcare workers, including all MBBS Doctors and Nurses Regardless of their year of graduation and designation, should be working in private tertiary care hospital of Karachi, Pakistan. Tertiary Care Hospitals: Highly specialized medical care usually over an extended period that involves advanced and complex procedures and treatments performed by medical specialists in state-of-the-art facilities. A non-probability judgmental sampling is performed to identify the subject and administer the closed ended questionnaire. The sample size was intended to exceed to the thumb of at least a multiple of five to the total numbers of items in all constructs in the model (Hair et al., 2017, 2014) to draw a reasonably good inference in the structural equation model. The sample size of 159 was achieved which is well above this threshold.

3.2 Scale and Measures

Survey instrument has been designed by 2 validated tools SEHC and, only one section of validated tool from Employee well-being has been used that is workplace well-being. (Pradhan & Hati, 2022). US conducted a pilot survey to validate the SEHC tool which is believed to be a single confirmatory tool for job satisfaction in healthcare workers (Chang et al., 2017). According to World Health Report 2006, Ethiopia was one of the 57 countries who faced severe shortage of healthcare workers. To find the cause of this scarcity Ethiopian Federal Ministry of Health with the help of used Satisfaction of Employees in Health Care (SEHC) survey and evaluates the issues of Ethiopian and other low-income countries.

SEHC survey tool has been used ubiquitously. Regardless of this, SEHS is not used in any of the research conducted in Pakistan. Reason of choosing this tool is to fill this gap and find out the responses of Pakistani healthcare workers (doctors and nurses) and to Validate the Satisfaction of Employees in Healthcare (SEHC) tool in the Pakistani context and testing the impact of satisfaction on the workplace wellbeing of healthcare workers.

Therefore, a closed end questionnaire is constructed with section A as demographics containing 8 items including age, gender, marital status, no of children, category of health workers (doctors and nurses), work experience (after graduation), income per month, working hours per week. The latent constructs were measured using a five-point Likert scale from strongly disagree (1) to strongly agree (5).

Table 3.1 Scale and measures

#	Latent Constructs	Reference	Items	I
	Job Content (JC)	Chang et al., (2017)		5
	Relationship with Co-workers (RWC)	Chang et al., (2017)		2
	Relationship with Management and Supervisors (RWM&S)	Chang et al., (2017)	1	1
	Workplace Wellbeing (WWB)	Pradhan & Hati, (2022)		9

Data has been administered via online Google form through face book messenger, What Sapp to friends, relatives and other related people individually as well as via groups. Also requested them to share with other people who fulfill the require.

4.0 Findings and Results

Table 4.1 Demographic profile of respondents

Category	Items	Frequencies	Percentage
Gender	Male	49	30.8
	Female	110	69.2
Speciality	Doctor	78	49.1
	Nurse	81	50.9
Age	20-30 years	45	28.3
	31-40 years	88	55.3
	41-50 years	21	13.2
	51 or above	5	3.1
Marital Status	Single	42	26.4
	Married	112	70.4
	Divorced	2	1.3
	Widow	3	1.9
No. of Children	0	59	37.1
	1	29	18.2
	2	40	25.2
	3	21	13.2
	4	5	3.1
	5	2	1.26
	6	1	.6
	7	2	1.3
Income	Less than 40K	28	17.6
	40-50 K	13	8.2
	51-60 K	21	13.2
	61-70 K	10	6.3
	71-80 K	15	9.4
	81-90 K	18	11.3
	91-100 K	11	6.9
	Greater than 100K	43	27.0

The demographics of the respondents show a nearly equal representation of doctors and nurses in the study. However, more female representation was observed (69.2%) compared to male population (30.8%). In terms of age, most participants (55.3%) are between 31-40 years, followed by 28.3% in the 20-30 age group, while older age groups (41-50 years and 51 or above) are less represented at 13.2% and 3.1%, respectively. Regarding marital status, the majority are married (70.4%), while single respondents constitute 26.4%, with divorced and widowed participants accounting for a combined 3.2%. The number of children varies, with 37.1% having no children, while 25.2% having two children, and smaller proportions have three or more, with only 1.3% having as many as seven children. The income distribution shows that a significant proportion of respondents (27.0%) earn more than 100K, while 17.6% earn less than 40K, indicating a wide range of income levels among participants. The majority fall into middle-income brackets, with smaller clusters earning between 40K and 90K. This diverse demographic profile provides a broad basis for analyzing the relationship between job satisfaction and well-being among healthcare professionals.

4.1 Measurement Model

Table 4.1 Reliability and convergent validity

	Cronbach's Alpha	CR	AVE
JC	0.815	0.871	0.576
RWC	0.608	0.836	0.718
RWM&S	0.966	0.971	0.751
WWB	0.926	0.938	0.630

*Composite Reliability (CR) > 0.7. Average Variance Extracted (AVE) > 0.7

The Cronbach alpha and composite reliability are two important measures for internal consistency and reliability (Hair et al., 2013). Table 4.1 shows that all the values of Cronbach alpha and CR exceed the threshold of 0.7 (Hair et al., 2013), therefore the measures are reliable. Also, the convergent validity measure (AVE) is crossing the cutoff of 0.5. Hence, according to Hair et al., (2006) convergent validity of the constructs is established.

Moreover, the discriminant validity is measured by HTMT and Fornell-Larcker criteria (Hair et al., 2013; Fornell & Larcker, 1981), as shown in tables 4.2, 4.3.

Table 4.2: Fornell-Larcker Criterion

	JC	RWC	RWM&S	WWB
JC	0.759			
RWC	0.562	0.847		
RWM&S	0.705	0.463	0.867	
WWB	0.741	0.620	0.751	0.794

Note: The diagonal values represent the square root of AVE

According to Fornell & Larcker, (1981), the square root of the Average Variance Extracted (AVE) for each construct (diagonal values) should be greater than its correlations with other constructs (off-diagonal values). The diagonal values, representing the square root of AVE, are highlighted as follows: JC (0.759), RWC (0.847), RWM&S (0.867), and WWB (0.794). therefore, discriminant validity is established according to Fornell and Larcker criteria.

Table 4.3: Heterotrait-Monotrait Ratio (HTMT)

	JC	RWC	RWM&S	WWB
JC				
RWC	0.800			
RWM&S	0.792	0.596		
WWB	0.846	0.825	0.780	

Table 4-3 shows the HTMT ratios for assessing discriminant validity. The HTMT values for all construct pairs are below the conservative threshold of 0.85 (Henseler et al., 2015; Vinzi et al., 2010), indicating acceptable discriminant validity, which further affirms that the constructs are distinct.

4.2 Model explanatory power

The model explains a substantial proportion of variance in workplace well-being ($R^2=0.698$, $R^2 = 0.698$, & $R^2=0.698$, adjusted $R^2=0.692$, $R^2 = 0.692$, & $R^2=0.692$), reflecting good explanatory power. Moreover, the effect size of the predictor is cross checked with Cohen, (1988) that suggested that thresholds for effect size ($f^2=0.02$, $f^2 = 0.02$, $f^2=0.02$ small; $f^2=0.15$, $f^2 = 0.15$, $f^2=0.15$ medium, $f^2=0.35$, $f^2 = 0.35$, and $f^2=0.35$ large). Among the predictors, the relationship with management and supervisors showed the strongest effect ($f^2=0.291$, $f^2 = 0.291$, $f^2=0.291$) which suggested a medium effect size, followed by the relationship with co-workers ($f^2=0.148$, $f^2 = 0.148$, $f^2=0.148$, small-to-medium effect size) and job content ($f^2=0.128$, $f^2 = 0.128$, $f^2=0.128$) which is a small effect size. The model fit explains a reasonably good explanatory power.

Table 4.4: Model explanatory power

f-Square	R Square	R Adjusted	Square
	Workplace well-being	0.698	0.692
Job Content	0.128		
Relationship with Co-workers	0.148		
Relationship with management & Supervisor	0.291		
Work place well-being			

4.3 Structural Model Analysis

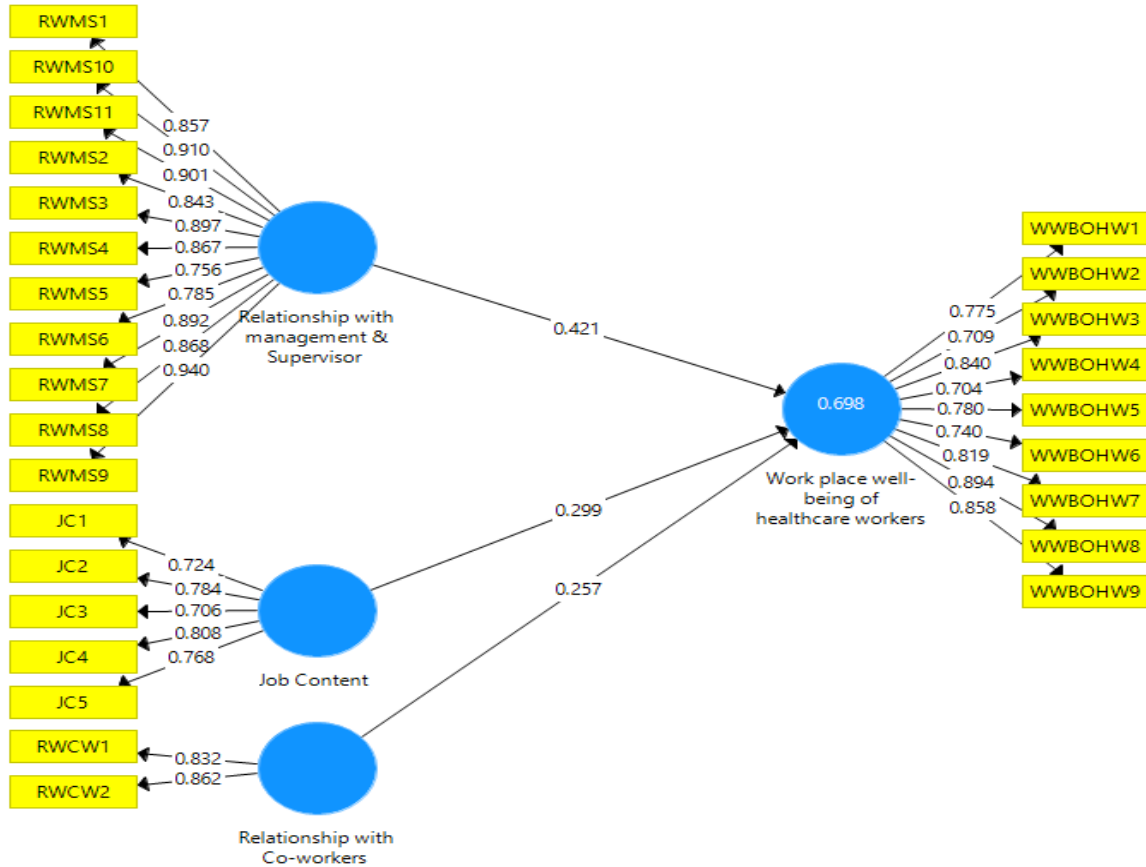


Figure 4.1: Measurement Model

Table 4- 5 Path Coefficients

	Beta Coefficients	SD	T Statistics	P Values
Job Content -> Workplace well-being	0.299	0.072	4.136	0.000
Relationship with Co-workers -> Workplace well-being	0.257	0.080	3.199	0.001
Relationship with management & Supervisor -> Workplace well-being	0.421	0.081	5.183	0.000

Relationship is significant at $p < 0.05$

The results of the structural model reveal statistically significant relationships of job content, relationships with co-workers, and relationships with management and supervisors in predicting workplace well-being. Job Content ($\beta = 0.299$, $t = 4.136$, $p < 0.05$) has a significant positive impact on workplace well-being, suggesting that engaging and meaningful job roles enhance employee well-being. Likewise, Relationship with Co-workers ($\beta = 0.257$, $t = 3.199$, $p = 0.05$) exhibits a significant positive relationship, highlighting the importance of collegiality. Similarly, Relationship with Management and Supervisors ($\beta = 0.421$, $t = 5.183$, $p < 0.05$) demonstrates the strongest influence, highlighting the critical role of supportive management in encouraging workplace well-being. These findings underscore the multi-faceted contributors to employee well-being, with managerial relationships playing a pivotal role.

Table 4.6: t-test for equality of means

				Levine's Variance Equality Test		t-test for Equality of Means						
		Mean	SD	F	Sig.	t	df	Sig.	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
WWB (H4)	Doctors	3.7	.58971	.10	.74	-.8	157	.379	-.08784	.09958	-.2	.108
	Nurses	3.7	.66225			-.8	156.05	.378	-.08784	.09936	-.2	.108
RWM &S (H5)	Doctors	3.4	.57580	.48	.48	-2.	157	.015	-.22667	.09176	-.4	-.04
	Nurses	3.682	.58088			-2.	156.86	.015	-.22667	.09174	-.4	-.04
JB (H6)	Doctors	3.212	.79697	.87	.35	-3.	157	.002	-.38471	.12047	-.6	-.146
	Nurses	3.597	.72145			-3.	154.10	.002	-.38471	.12070	-.6	-.146
RWC (H7)	Doctors	3.775	.77563	5.8	.01	-9	157	.353	-.10708	.11497	-.3	.1200
	Nurses	3.882	.67208			-9	152.0	.354	-.10708	.11528	-.3	.120

The independent sample t-test was conducted to compare the perceived workplace wellbeing, relationship with management and supervisor, job content and relationship with co-workers between doctors and nurses. From table 4.6, the mean score of the perceived workplace wellbeing between the doctors (M = 3.7023, SD = 0.58971) and nurses (M = 3.7901, SD = 0.66225) which appears to be nearly equal. Levene’s test for equality of variance is not significant (p = 0.742), reflecting that the equality of variance between the two groups is assumed. Also, the difference between doctors and nurses regarding the workplace wellbeing is not significant (t = -0.882; p = 0.379), therefore hypothesis H4 is rejected, concluding that there is no difference between doctors and nurses regarding the workplace being.

The mean score between the doctors (M = 3.455; SD = 0.57580) and nurses (M = 3.6824; SD = 0.58088) regarding relationship with management and supervisors are different. Levene’s test for the equality of variance is not significant (p = 0.488) which reflects that equality of variance is assumed. The difference between the two groups regarding is significant (t = -2.470; p = 0.15), therefore H5 is accepted concluding that there is a difference between the doctors and nurses regarding the relationship with management and supervisors.

A difference in job content is reflected between doctors (M = 3.2128, SD = 0.79697) and nurses (M = 3.5975, SD = 0.72145). Levene’s test is not significant (p = 0.352), assuming the equality of variance. From the upper row of this segment, a statistically significant difference is

exhibited ($t = -3.193$; $p = 0.002$). Therefore, H6 is accepted, and it is concluded that a significant difference exists between doctors and nurses regarding the job content.

Likewise, the difference between doctors ($M = 3.7756$, $SD = 0.77563$) and nurses ($M = 3.8827$, $SD = 0.67208$) are evident, in respect of relationships with co-workers. The Levene's test for equality of variance is not significant ($p = 0.16$), so the equality of variance is assumed. Levene's test for the equality of variance is significant ($p = 0.016$), suggesting that the equality of variance is not assumed. From the lower row of this segment, there is no significant difference between the doctors and nurses regarding the relationship with co-workers ($t = -0.929$, $p = 0.354$). Therefore, H7 is not supported. It is concluded that there is no significant difference between doctors and nurses regarding relationships with co-workers

5.0 Discussion and Conclusion

The findings of this research reiterate the importance of job satisfaction for healthcare workers as highlighted by Cantarelli et al., (2023) and English et al., (2024) and furnished valuable insights into factors influencing workplace well-being in Pakistani hospitals, emphasizing the critical roles of job content, relationships with co-workers, and relationships with management and supervisors. The results aligned with previous studies, such as (Okon et al., 2023) and (Qamar et al., 2023). The significance of job content and workers wellbeing suggests that employees who find their work meaningful, engaging, and aligned with their skills are more likely to experience higher levels of well-being. For Pakistani hospitals, this highlights the need to improve job designs by aligning roles with individual competencies, reducing redundant tasks, and providing opportunities for professional development. The findings are consistent with Fouri et al., 2024, Patil & Shankar, (2023) and Spierings et al., (2024) that underscore the importance of interesting job design. Addressing role clarity and workload balance can also enhance satisfaction and reduce burnout. A positive relationship among healthcare workers contribute to workplace well-being. Teamwork and mutual support foster a collaborative environment that buffers stress and improves job satisfaction. Hospital management should prioritize team-building initiatives, conflict resolution training, and platforms for open communication to strengthen these relationships. Encouraging inter-professional collaboration is essential for creating a cohesive and supportive workplace culture. Additionally, there is a very strong is found influence of management role on workplace well-being. Supportive and effective leadership that values employees' contributions, provides constructive feedback, and fosters trust significantly boosts workplace well-being. For hospitals in Pakistan, this implies an urgent need for leadership training programs focusing on emotional intelligence, communication skills, and participatory management practices. Additionally, ensuring transparency and fairness in decision-making processes can strengthen these relationships.

Also, nursing and medicine involve two different roles at the workplace. The findings highlight key differences in workplace well-being (WWB), relationship with management and supervisors (RWM&S), job content (JC), and relationship with co-workers (RWC) between doctors and nurses in Pakistani healthcare organizations. While WWB and RWC showed no significant differences between the groups, nurses reported significantly higher scores in RWM&S and JC, indicating stronger relationships with management and supervisors and greater satisfaction

with job content. These findings suggest that while collaboration and well-being are generally consistent across professions, doctors face distinct challenges related to job content and managerial relationships, potentially increasing their risk of burnout.

5.1 Implications for healthcare management

The results of the study reveal the multidimensional nature of workplace well-being and its dependency on job content, co-worker relationships, and managerial support. Therefore, to enhance workplace well-being, hospital administrators must adopt a holistic approach incorporating the variables of job satisfaction by improving the job design, fostering teamwork, and strengthening positive role of managers and leadership. Tailor roles to fit individual competencies, provide career growth opportunities, and address workload challenges. Implement team-building activities, resolve conflicts proactively, and encourage cross-disciplinary collaboration. Train managers and supervisors to adopt supportive leadership styles, provide regular feedback, and involve staff in decision-making processes.

By addressing these areas, Pakistani hospitals can create a healthier work environment, leading to reduced employee turnover, improved morale, and better patient care outcomes. Future research could explore how these relationships vary across different hospital settings, such as public versus private, and evaluate the long-term impact of targeted interventions.

Since, the difference between the two specialties of doctors and nurses are significant, this implies tailored approach and interventions for each of the two fields of practice. Enhancing doctors' engagement may involve improving job design, addressing workload stressors, and fostering more effective communication with supervisors. For nurses, sustaining their positive experiences in job content and management relationships can further strengthen the overall organizational culture. Leadership training programs, regular feedback systems, and initiatives to promote collaborative problem-solving are essential strategies for bridging these gaps.

5.2 Future research directions

Future research should investigate the specific organizational and cultural factors driving these differences, particularly within resource-constrained environments typical of Pakistani hospitals. Longitudinal and qualitative studies could provide deeper insights into the interplay between these variables and their impact on healthcare outcomes. Also, different models of job satisfaction may provide a different and deeper inside into the hospital work settings. Moreover, the inter-relationships of different variables, like workplace bullying, burnout, turnover intentions may also be investigated in the tertiary care hospitals in various developing countries where research is limited to highlight those burning issues.

5.3 Limitations

Study must be completed in limited time frame, that is the big limitation that a larger sample size has not been achieved. Data has been gathered by self-contacts and snow bowling of contacts, no higher management of any hospital, Government or NGO has been involved, otherwise more data can be managed by fulfilling the legal requirements and can make any related changes in system.

Sehrish: Problem Identification and literature review

Mirza Kashif Baig: Theoretical Framework, Data Analysis, Methodology and Revisions.

Rukhsana Rizwan: Drafting, Copy Editing

Conflict of Interests/Disclosures

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