How Human Resource Practices Affect Patient Satisfaction Through Paramedical Staff Behavior: A Study on Public and Private Sector Hospitals in Punjab, Pakistan

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Abstract

Each country's healthcare system is distinct, tailored to the specific requirements of its citizens, and made possible by the resources at its disposal. Adaptability, self-awareness, and research into international healthcare models are essential components of any effective healthcare system. This is due to the growing public health concerns and rising demand from the populace. This study will investigate the challenges facing the healthcare system in Punjab. Punjab is the biggest district in Pakistan, with 110 million inhabitants. The cultures of patient care in public and private hospitals in the city of Punjab are the focus of this research. The study believes that factors such as workload, competency, training, job security, and perceived service quality impact patient care. The study will employ conveniently selected samples for this purpose. Policymakers and healthcare administrators in Pakistan can use the study's results to better understand what variables contribute to patients' positive or negative experiences with their care. In order to determine the relationship between patient satisfaction and the independent variables of workload, competency, training and development, job insecurity, and perceived service quality, we will look at the paramedical staff's behavior as an intermediary. Compassionate behavior on the part of medical professionals is associated with increased patient satisfaction, according to the research, provided that these professionals have job stability, receive positive feedback about the quality of their service, and engage in continuous professional growth.

Keywords: Workload, Competency, Training and Development, Job Insecurity, Perceived Quality Service, Employee Behaviour, Patient Satisfaction.

Introduction

Patient satisfaction is crucial to assessing health care quality and performance (Ali et al., 2024). Job instability, workload, competence, training and development, employee conduct, and service quality impact patient satisfaction. Understanding how staff behaviour affects these characteristics

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and patient satisfaction improves health care delivery (Chehayeb & Taher, 2024). Hospital culture impacts community choice, and patient care affects nurses, doctors, and staff. HR should manage HRM to boost production and performance (Suwaji et al., 2024). Public hospital quality is important nowadays. To please patients, hospitals must offer outstanding care and assure medical personnel effectiveness and professionalism (Radu et al., 2022). Another scholar revealed that healthcare quality assurance as all measures to enhance it (Rotea et al., 2023) . Hospital HRM is crucial to the facility's functioning and development, yet healthcare services are different and unpredictable, making internal work process standardization challenging. Thus, contemporary hospital administration must optimize human resource allocation for work efficiency (Zhang et al., 2025). Another research revealed that five significant issues: a lack of a hospital-specific HRM department, hospital autonomy over decision-making, practice clarity, uncertainty, and complexity, staff attitudes and behaviors, and patient care quality (Jafree et al., 2022) . Five primary literature findings are examined. Like earlier studies, we found HRM issues in Pakistani public healthcare. Insufficient resources, personnel, and local autonomy were challenges (Faisal et al., 2023).

Despite efforts, Punjab's healthcare sector's HRM activities remain centralized (Faisal et al., 2023). Without HR departments or staff, researchers observed inadequate hospital HR competence and distrust of HR roles. Interviewees said a decentralized, professionalized HRM system may improve hospital performance. In Pakistan, HRM methods helpful and maybe beneficial despite their limits. Evidence suggests High-Performance succeed Systems (HPWS) succeed because its bundled practices achieve shared goals and reinforce positive attitudes and behaviors. Unprofessionalised, decentralized HRM systems caused unclear duties, team disagreements, limited decision-making autonomy, and misaligned incentives, according to Nasir (2022), no High-Performance Work Systems (HPWS), they found potential in information sharing, teamwork, and fair remuneration (Bashir et al., 2022) . Pakistan's public sector has nepotism, unequal incentives, and unethical behaviour. Appointing management-savvy CEOs, defining tasks, decentralizing decisions, and stressing accountability were proposed improvements. HRM affects patient care quality, and the Hospital Model Tower seeks government support to raise standards (Eliyana & Anwar, 2022). Pakistan is the sixth most populated nation, with 66% rural and 34% urban (Hafeez et al., 2023). Punjab is Pakistan's most populous province, with over half the population, according to the Punjab Health Sector Strategy 2019-20. Punjab has BHUs, RHCs, THQs, and DHQs. Union council BHUs offer basic healthcare.

Table 1: Healthcare System of Pakistan

S. No	Health Facility Type	Population Health Facility Catering	Provision of Services/Facilities
1	Basic Health Unit (BHU)	25,000 to 50,000	Promotive, Preventive and Curative Primary Health Care Services
2	Rural Health Care Centre (RHC)	50,000 to 100,000	Essential diagnostic and Inpatient Primary and Secondary Health Care Services
3	Tehsil Head Quarter Hospital (THQ)	100,000 to 500,000	Consultants Outdoor Indoor Operation Theatre Tertiary Health Care Services
4	District Head Quarter Hospital (DHQ)	500,000 to 30,00,000	Investigation at Advance Level and Complicated Diseases Cure and Treatment

Source: Pakistan Bureau of Statistics (2023).

A Basic Health Unit (BHU) provides basic, preventive, and curative care to 25,000–50,000 people and refers them to more sophisticated care. Second-level RHCs serve 50–100,000 people. BHUs and RHCs diagnose and treat. Primary healthcare relies on BHUs and RH. This research evaluated Punjab BHUs and RHCs' public health services using scenario analysis. We needed public health policy and decision-making baseline data. Rural patients are hard to fit into city hospitals. Overworked, they lack money and personnel. Provincial governments took over public hospitals and health services. Provinces may focus and alter health policies to enhance healthcare (Yaqinuddin et al., 2016).

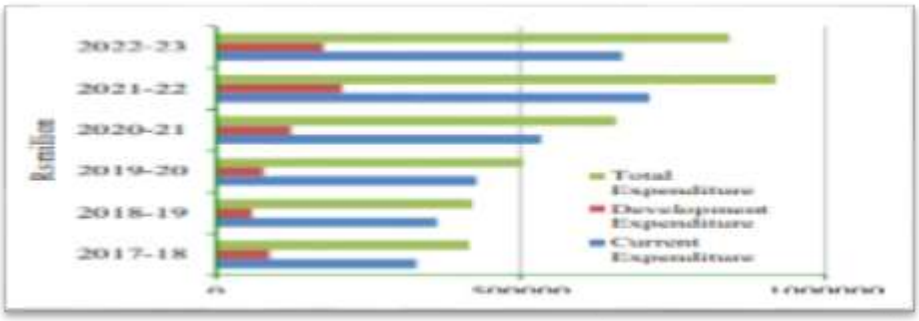
Table 2: Human Resources in the Pakistan's Healthcare System

Health Manpower	2017	2018	2019	2020	2021	2022	2023
Doctors	208007	220829	233261	245987	266430	282383	299113
Dentists	20463	22595	24930	27360	30501	33156	36032
Nurses	103777	108474	112123	116659	121245	127855	127855
Midwives	38060	40272	41810	43129	44693	46110	46110
Lady Health Workers	18400	19910	20565	21361	22408	24022	24022

Source: Pakistan Bureau of Statistics (2023).

These changes are challenging for provincial health departments due to structural fragmentation, resource shortage, management competence, and functional uniqueness. Patient satisfaction influences macro system performance management, benchmarking, and competitiveness, while micro components include administration, people, and socially acceptable systems continuity (Chakraborty et al., 2023). The conduct and qualifications of hospital personnel may reflect service quality. Research reveals that professional medical personnel provide patients status updates, guidance, explanations, and direction to make them feel cared for. Behavior correlated positively with patient satisfaction. Value the person, high-quality rapport, devotion, and responsiveness of the supplier. Patient satisfaction is critical to hospital choice.

Figure 1: Expenditure on Health Sector



Source: Pakistan Bureau of Statistics 2023.

Important findings include patient satisfaction and treatment quality. Many therapy and care techniques have been studied, but their relationship is still contested (Crowe et al., 2024). Hospital care quality and patient outcomes depend mainly on nurses, the core of the health care delivery

system. Doctors and nurses' communication skills impact satisfaction. Private patients are happier with treatment than public ones (Werdecker & Esch, 2021). Private hospital patients are happier with doctors, nurses, and supported services than public hospital patients, and doctors judge quality (Fatima et al., 2018). Patients evaluate personnel interpersonally rather than technical competence. Analyzing concrete and immaterial factors. Food and surroundings were palpable, but empathy, friendship, religious needs, illness understanding, and dignity were not. The doctor's interviews showed that the patient requires a companion to contact hospital administration (Loft et al., 2019). Customer satisfaction increasingly depends on personal quality. Clinical care, hospital image, and trustworthiness impact patient satisfaction, whereas infrastructure and administrative procedures affect attendant satisfaction. Government hospitals anticipated qualified physicians, whereas private hospitals predicted physical environment and infrastructure (Swain, 2019). As population's age, consumer demand and expectations rise, and technology advances, governments worldwide face rising healthcare costs. High-performance work systems (HPWS) are claimed for enhancing health outcomes and patient satisfaction by altering healthcare personnel' attitudes and actions in response to these challenges.

Table 3: Regional comparison of Health Indicators of South Asia and Pakistan

Indicators	South Asia	Pakistan
Life expectancy at birth (years)	71.6	67.3
Maternal mortality ratio (per 100,000 births)	138(2020)	186(2019)
Birth rate (Crude) per 1000 people	18.3	27.5
Mortality rate, Infant (per 1000 live births)	30.8	52.8
Prevalence of HIV (total %age of population 15-49 years of age)	0.20	0.2

Source: Pakistan Bureau of Statistics (2023).

Emerging nations like Pakistan have healthcare system issues due to extreme poverty, war, rural isolation, preventable diseases, and natural disasters (Topluoglu et al., 2023). These challenges question Western management practices like HPWS in governmental hospitals. As over 40% of Pakistanis live in multidimensional poverty and just 20% have access to public healthcare, resource restrictions limit public health efficiency. Low government spending hinders healthcare (Saleem, 2023).

This research analyzes how HPWS might improve HRM at Pakistani public hospitals, notably Lahore's large teaching tertiary institutions. Pakistani HRM practices include weak planning, resource allocation, and little use of contemporary HRM methods. This study will explore how current HRM strategies like HPWS may effect employee attitudes and behaviors in Pakistan's healthcare sector. According to study, workload, competence, job instability, training and development, and perceived service quality affect staff behavior and patient happiness (Sari, Ginting, & Nasution, 2025). The research also evaluates how HR practices impact medical staff behavior and patient satisfaction, which is becoming a significant indicator of healthcare quality.

Increasing theoretical and practical healthcare HR knowledge should enhance staff behavior and patient care. HPWS's HRM management in resource-constrained public healthcare settings like Pakistan will be assessed to improve organizational performance and patient outcomes.

Literature Review

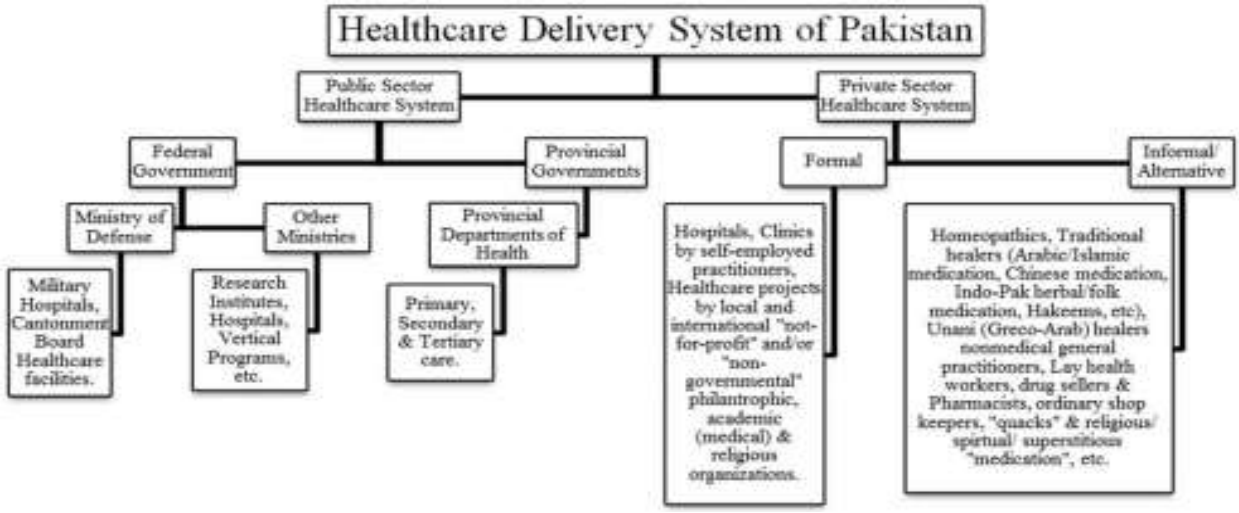
Literature reviews, essential to study, may map other researchers' ideas. It helps researchers comprehend other studies' results. You may find study gaps and develop your research identity. Identifying gaps works. This chapter defends the study's question. The literature review is essential to research. It clarifies the problem. Despite their problems, the three tales showed both public and private nurses were dissatisfied (Craveiro et al., 2025). Over five years, public workers were unhappy. Most respondents became nurses to serve others, and their families supported them, although many struggled. Different working conditions for public and private nurses. Public hospital nurses requested respect from doctors, patients, and families despite limited resources (Tai et al., 2023). The first two stories demonstrate this. Respectlessness is linked to poor work satisfaction in Pakistan and Lebanon, research finds. Results are similar (Chaanine, 2025). Numerous studies show that colleague ties affect nurse job satisfaction and retention. Public sector nurses felt younger doctors would respect them if older doctors respected them and did not insult them in front of patients. In private hospitals respected nurses because management did (Ciasullo et al., 2024). Most respondents who worked in the public sector were happier with the comparison. Public nurses complained about pay and conditions (Ng et al., 2023). Limited staff means government hospital nurses work long hours and several shifts (Tamata & Mohammadnezhad, 2023). Stressed nurses at a reputable hospital demanded more wages in the third scenario. They worked in a private hospital despite exhaustion to get job abroad.

WHO's "Framework for Action" contains six health care system elements (Hamid et al., 2018). The connections between these components constitute a system. Each component affects and is impacted by the others. Leadership and governance provide equitable human resource distribution and a variety of talents for optimal health care (Zettna et al., 2025). Organizational changes are necessary to sustain the motivation of within-24-year nurses to work within limits. A few simple techniques may assist keep such a valued team. The research also stressed the need of orientation, preceptor ship, and technical skill development for graduate retention (Jubic, 2024). Keeping graduating nurses may alleviate the nursing problem and assure the profession's future (Spence Laschinger et al., 2019). Pay must rise to retain this workforce in Pakistan. Especially in Pakistan (Saraswathy, 2023). Private Nurses maintained patient-to-nurse ratios. This didn't explain young nurses' stress. Bedside nurses worked for him (Li et al., 2023). All patient treatment was collaborative. The skilled nurses were continually scrutinized and responsible since the new hires were still learning, raising stress. Overnight public sector nurses must care for 25–40 patients (Jabeen et al., 2023). Private Nurses struggle with accountability and scrutiny. Previous study relates work stress to lower job satisfaction. This confirms previous findings. Although government hospital has more beds but fewer nurses. Our study indicated that nurses' working conditions may boost performance.

Medical staff activities affect patient satisfaction and results (Jibril, 2024). To improve service and experiences, healthcare firms must understand how medical staff behavior affects patient interactions (Danda et al., 2024). This introduction addresses the subject and provides relevant literature. Numerous factors affect nurses' employment happiness, research shows. Care quality and interpersonal ties (loyalty, trust, and shared values) affect job satisfaction. Helping patients makes nurses happy (Alshammari & Al-Enezi, 2024). Clear roles, a balanced workload, and acknowledgment for effort enhance workplace happiness (Paudel et al., 2024). Burnout and low job satisfaction result from excessive patient-to-nurse ratios, work dissatisfaction, insufficient empowerment, and poor leadership (Ocansey & Nertey, 2024). Workplace characteristics that are readily controlled impact new nurses' job happiness. These traits diminish the likelihood that they

will quit their positions within two years after graduation, notwithstanding their eagerness to work. Graduate nurses reported high stress and bullying, therefore researchers proposed adding social supports to transitional help. Employee retention required an orientation without staff shortages, inadequate time to learn, or insufficient opportunity to develop responsibilities. This was key to retention. This research explores HRM practices' direct and indirect effects on organizational performance and organizational change's mediation. The study focuses on empirical ways to enhance hospital performance. This research seeks high-quality work and organization growth. This research will employ work life quality, organizational commitment, job satisfaction, and psychological empowerment to improve nurse job performance. This research uses a quantitative questionnaire (Raharjo & Fitrianto, 2024).

Figure 2: HealthCare System in Pakistan



Source: Pakistan Bureau of Statistics (2023).

Table 4: Previous study/Research

Study/ Research	Key Findings/ Factors	Impact on Patient Satisfaction	Key Influencing Factors	Suggestions/Implications
Alhashem et al. (2009)	Study in Kuwait with 500+ patients	Patient satisfaction in primary health care clinics	Time spent with doctors, communication quality, need for specialists	More time for consultations, improve communication, hire specialists
Shabbir et al. (2016)	Service quality affects patient satisfaction	Higher service quality correlates with higher patient satisfaction	Service quality, hospital type	Focus on service quality in both public and private sectors
Emon et al. (2023)	Technology influences service quality	Technology improves service quality and patient satisfaction	Technology, service quality	Implement technology for better service delivery

Ayinaddis et al. (2023)	Service quality impacts satisfaction	High-quality service increases patient satisfaction and loyalty	Service quality, patient loyalty	Improve service quality to enhance patient loyalty
Salami et al. (2023)	Training programs improve staff behavior	Proper training enhances employee attitudes and care quality	Training and development	Invest in continuous training for medical staff
Zahra & Abbas (2023)	Nationality influences satisfaction	Non-Kuwaiti patients (especially Asian) have lower satisfaction	Nationality, general health status	Address cultural sensitivity and health disparities
Farid et al. (2023)	Supportive leadership improves employee behavior	Positive leadership leads to better staff behavior and satisfaction	Leadership, workload management	Encourage supportive leadership and effective communication
Javed et al. (2023)	89% patients dissatisfied with consultation time	Insufficient consultation time leading to dissatisfaction	Doctor-patient interaction	Increase consultation time, improve doctor-patient rapport
Lilly et al. (2023)	72% patients prefer ER over clinics	Patient dissatisfaction with primary care clinics	Emergency room preference, poor communication	Improve clinic services, enhance communication

Lack of healthcare infrastructure in rural Pakistan results in inadequate medical services (Kurji et al., 2016). Thus, medical services are inadequate. Hospitals require resources to provide quality care. This is due to government budget limitations and other factors. Public healthcare organizations addressing significant health concerns work best in large cities and towns. Poor and rural populations consult private physicians more. The scarcity of these institutions and high transportation costs make them hard to access (Abbas & Talib, 2024). Research provide community-based chronic illness assistance. The programs help people maintain their health every day. Such help is self-management hold. Self-management lets individuals learn about their conditions and control their health (Pradhan et al., 2022). Pakistan fulfilled the Millennium Progress Goals for a dropping youngster owing to its growth, the study stated. The maternal mortality rate was "unsatisfactory." Pakistan has the highest maternal, fetal, and child death rate save for two countries (Pasha et al., 2015). Large Pakistani population boosts this rate. Pakistan's largest public health and humanitarian catastrophe threatens children's lives, study finds. Simply training additional nurses and midwives (who are outnumbered by doctors) may have saved over 200,000 women and children in 2015. The WHO ranked 195 nations' healthcare. Rankings are falling. Pakistan ranked 154th, behind India (145), China (47), Bangladesh (133), and Sri Lanka (71), revealing. Interesting that Pakistan lags behind south Asian countries (Ullah, 2017). Pakistan remains among these countries.

Social exchange theory explains medical staff behavior, patient satisfaction, and independent factors including workload, competence, job insecurity, training and development, and perceived service quality. Sociologist George Homans established social exchange theory in 1958. He initiated it. The social exchange hypothesis explains two or more individuals exchanging a physical or intangible, expensive or rewarding action (Mishra & Mund, 2024). This principle determines the process, he explains. Social exchange theory the best framework for worker behavior analysis. Theorists mainly agree. Activities indicate these connections are interdependent. Social exchange theory stresses how interwoven interactions may form amazing

partnerships. Patient satisfaction and medical staff behavior are being researched (Batra & Taneja, 2024). With its theoretical underpinning, Social Exchange Theory aids this inquiry. The Social Exchange Theory posits that individuals engage to maximize advantages and reduce costs. This theory states that individuals are more willing to engage in relationships and transactions when they are treated well and get something. A literature flow map will be followed by discussions and explanations of relevant research. After then, the dispute continues.

Stage two examine SHRM/HPWS viewpoints and implications. The research found that uniqueness, consistency, and consensus are crucial to national management-level strategic HRM/HPWS strategy interpretation. Their results show that social identity modulates the link between high-performance work systems (HPWS) and emotional commitment, which influences job satisfaction. Despite their study limitations, the results provide management practitioners valuable insights into healthcare human resource management progress. A research examined current self-poisoning themes and attitudes. Researchers said this was one of the biggest hospital medical crises (Bull et al., 2024). The research explored doctors' and senior nurses' views on common medical ward illnesses. His research also found that nurses and young physicians typically criticize self-harmers, even if they provide treatment. Four consultant doctors and 41 subordinate staff member's five senior registrars, 13 registrars, and seven senior house officers made up the medical staff. The poll included eight ward sisters and eight staff nurses as senior nurses.

Table 5: Key findings of studies

Study/Author(s)	Focus	Methodology	Key Findings
Poll Study (Home Physicians)	Impact of preregistration obligation on patient behavior	Four-month post-preregistration survey	- Patients self-poisoning without prior medical consultation lead to quicker discharge due to lack of social/personal history.
Ahmed et al. (2024)	Patient safety, satisfaction, and hospital quality	Cross-sectional survey in 12 countries (Europe & U.S.)	- Variability in care quality & nurse burnout rates across countries. - Decreased patient-to-nurse ratios & better work environments linked to higher patient satisfaction and quality of care. - Global deficiency in hospital quality.
Chanda et al. (2023)	Employee behavior and patient satisfaction	Behavioral analysis across departments	- Competency in individual & generic skills of medical staff impacts patient satisfaction. - Nursing department competencies most significant for patient satisfaction.
Kwame et al. (2021)	Relationship between competency & patient satisfaction	Survey analysis	- Higher competency correlates with more patient-centered behavior and better satisfaction.
Kim et al. (2023)	Competency & patient satisfaction	Cross-sectional study	- Positive association between staff competency and higher quality patient care, fostering good patient-provider relationships.

Farid et al. (2023)	Competency and patient happiness	Literature review	- Improved competency enhances patient experiences. - Training programs boost competency and satisfaction.
Salami et al. (2022)	Training, employee behavior, and patient satisfaction	Training program evaluation	- Training boosts medical staff's competence, job satisfaction, and patient interaction skills. - Continued education and leadership involvement improve patient satisfaction.
Oweidat et al. (2023)	Leadership, competency, and employee behavior	Case study and leadership style analysis	- Supportive and transformational leadership enhances staff behavior and competency.
Üngüren et al. (2024)	Job insecurity, employee behavior, and patient satisfaction	Survey of healthcare employees	- Job insecurity negatively affects employee behavior and patient satisfaction. - Lower engagement, stress, and poorer care associated with job instability.
Abugre & Bhengu (2024)	Job insecurity and staff cooperation	Employee behavior study	- Job insecurity leads to poor cooperation and reduced patient-centered care, diminishing patient satisfaction.
Oweidat et al. (2023)	Job insecurity and patient care	Study of job insecurity in healthcare	- Negative correlation between job instability and patient satisfaction.
Lee et al. (2018)	Employee engagement and job security	Survey and employee feedback	- Transparency, involvement, and supportive leadership can reduce job insecurity's negative impact on behavior and patient satisfaction.
Kim & Wang (2024)	Leadership, job insecurity, and satisfaction	Leadership and organizational study	- Trust and support from leadership mitigate the effects of job insecurity on employee behavior and patient satisfaction.

The primary components of each study are summarized in this table, with an emphasis on the methodology, significant findings, and their implications for patient satisfaction and employee behavior.

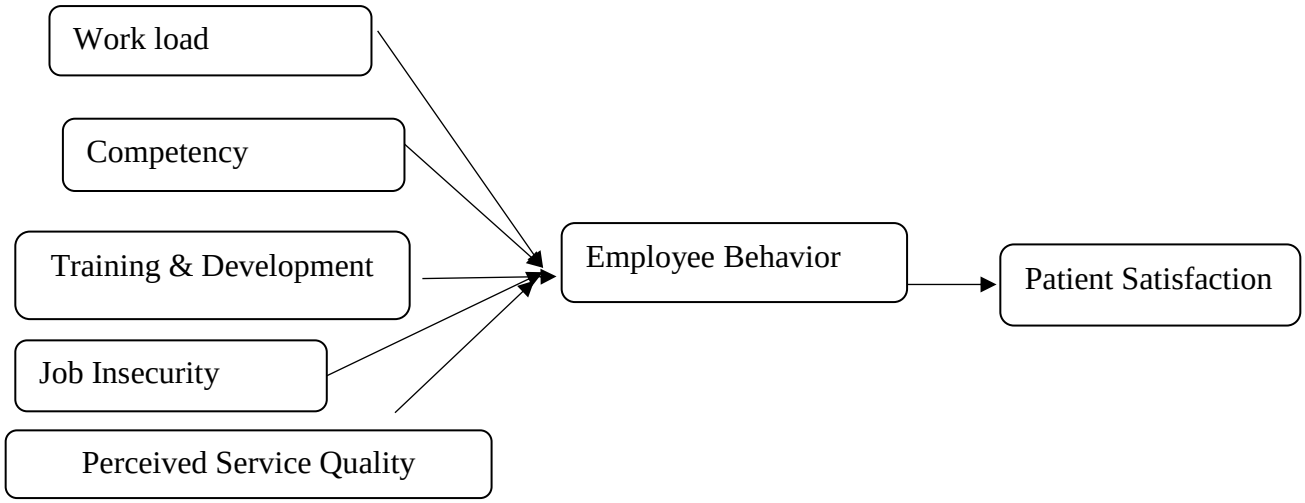
Table 6: Research gap

Research Gap	Description
Lack of Comprehensive Study on Collective Impact	While individual elements influencing medical employee behavior and patient satisfaction are studied, there's a need for research that examines the collective impact of various factors (workload, competency, job instability, training and development).
Limited Application of Quantitative Research Methods	Despite the widespread use of quantitative methods, there is a gap in applying these methods to gain deeper insights into the complex dynamics between employee behavior and patient satisfaction.
Need for Study on Impact of Medical Staff Behavior on Patient Satisfaction	There's a gap in understanding how medical staff behavior directly affects patient satisfaction and how these behaviors can be improved.
Scarcity of Training Opportunities in the Public Sector	Nurses in the public sector often lack access to training programs. This gap impacts their professional development, job satisfaction, and overall performance.
Lack of Structured Development and Promotion Opportunities in Public Hospitals	Public sector nurses face a lack of clear career advancement opportunities and structured promotion paths, which affects job satisfaction and employee morale.
Absence of Specific Training for Nurses in the Public Sector	A significant gap exists in providing targeted and structured training for nurses in the public sector. The training is often absent, especially in less developed regions, affecting their professional growth and patient care quality.
Gap in Physician Involvement in Nursing Education	There's a lack of structured involvement of physicians in the education and training of nurses in public hospitals, which impacts the overall quality of training and collaboration between staff.
Organizational Climate Differences Between Public and Private Hospitals	Differences in organizational climate, driven by the profit motives of private hospitals versus government-funded public hospitals, create gaps in employee satisfaction and performance.
Lack of Use of Mixed Research Paradigms	Existing research lacks the application of mixed-methods approaches that combine both quantitative and qualitative data to offer a more comprehensive understanding of the issues at hand.
Limited Focus on Social Exchange Theory in Healthcare	The current body of research largely overlooks the role of Social Exchange Theory in understanding the dynamics between healthcare workers and patients, leaving a gap in theoretical application.
Need for a Mediator Analysis on Employee Behavior	A gap exists in investigating the role of employee behavior as a mediator between independent factors (like workload, competency, etc.) and patient satisfaction, especially in the context of hospitals in Pakistan.
Underexplored Role of Workload and Job Insecurity on Employee Behavior	While workload and job insecurity are known to influence employee satisfaction, their direct impact on employee behavior and patient satisfaction remains underexplored.

This table is intended to assist you in the organization of the identified research gaps in a clear and concise manner.

Conceptual Framework

Figure 4: Theoretical Framework



Various marketing theories emphasize customer happiness. Audience engagement and informational needs are central to social marketing theory (Baron, 2025). Social marketing theories include audience participation. The current theoretical framework is based on two assumptions and dimensional research. Behavioral and consumer pleasure-based marketing are covered here. Mead's symbolic interactionism theory supports the study's conduct. Instead, justify the behavioral inquiry before continuing. Two key areas of research and two behavioral theories explain medical staff behavior. In interaction theory, symbols interact. Social interactions and symbolism form "self" Motion comes from complex self-interactions.

Hypothesis Development

H1: There has been a significant correlation between patient satisfaction and workload.
H2: A significant correlation exists between patient satisfaction and competency.
H3: There is a significant association between patient satisfaction and training and development.
H4: A significant correlation p exists between patient satisfaction and job insecurity.
H5: There is a significant association between patient satisfaction and perceived service quality.
H6: There is a significant correlation between patient satisfaction and employee behavior.
H7: There is a significant correlation between employee behavior and burden.
H8: A significant correlation exists between employee behavior and competency.
H9: There is a significant connection between employee behavior and training and development.
H10: There is a significant correlation between employee behavior and job insecurity.
H11: There is a significant association between employee behavior and perceived service quality.
H12: The relationship between patient satisfaction and workload is significantly mediated by employee behavior.
H13: The relationship between competency and patient satisfaction is significantly mediated by employee behavior.
H14: Employee behavior has a significant mediating effect on the relationship between patient satisfaction and training and development.
H15: The relationship between job insecurity and patient satisfaction is significantly mediated by

employee behavior.
H16: The relationship between patient satisfaction and perceived service quality is significantly mediated by employee behavior.

Research Methodology

The current research design and techniques are the focus of this chapter. This study analyzes research design, technique, and philosophy. This chapter covers study design ontology, epistemology, and components. These include the study's kind, purpose, unit of analysis, sampling process, population, sample size, response rate, scales of measurement, questionnaire pre-testing, data collection methods, operational definition and measures, and questionnaire design. After these sections, data analysis methods and statistical tools are explained. When designing a study, ontological and epistemological circumstances must be discussed philosophically. Making a research plan decision between pragmatism, interpretivism, and positivism takes time. Justification requires logic. This issue examines the paradigm argument and the history of important paradigm shifts in the field. Scientific positivism is reasonable and factual. Reductionism theory assesses the suitability, relevance, acceptability, and generalizability of information or ideas.

Research Design and Strategy

Study design should assist researchers choose methods and conduct research. Once the study purpose is determined, the researcher knows what data is required and how to gather it. Researchers know data collecting techniques. We will achieve our goals via quantitative study. The approach offers numerical data gathering for variable interactions and hypothesis testing. Quantitative methods are ideal for hypothesis testing since they are deductive (Weyant, 2022). This works best. Cooper allows quantitative correlation and single-subject studies.

Research Approach and Purpose of Study

Two techniques help researchers solve problems, distinguishing research projects. Researchers employ quantitative and qualitative methodologies (Mason et al., 2024). Cooper and Schindler (2013) define quantitative research as systematic and precise measurement of attitudes, actions, perspectives, and knowledge (Blumberg et al., 2014). A quantitative research study uses numeric data measurement and analysis to validate research aims, according to Zikmund, Qualitative research employs ideas, not data .
Qualitative and quantitative research have merits and downsides. Based on study objectives, any approach works. Quantitative study compares predictor factors (digital marketing attitudes) to outcome variables (purchasing choices). Researcher is analyzing quantitative data. Study aims include descriptive, exploratory, case, and analytical or predictive hypothesis testing (Khan et al., 2025). In some circumstances, researchers utilize hypothesis testing to assess variable correlations, mean differences between groups, and variable independence (Sekaran & Bougie, 2016).

Population

Polit and Hungler (1989) define "sampling" as "the process of selecting a portion of the population to represent the entire population (Polit & Hungler, 1989)." Definitions from their writings. Samples may be taken from qualifying populations. This is feasible. Worldwide, the Pakistan Medical Commission reported 14,568 hospitals and 274,994 physicians in 2021–2022. In 2021–2022, the Pakistan Medical Commission provided these data. Other healthcare professions employ

almost 400,000, whereas nursing employs 121,245 (Bilawal et al., 2024). Around thirty thousand basic, secondary, and tertiary hospitals are estimated globally. Medical personnel in Punjab is 251,194 vs 42,260 in KPK. Useful for comparison. The Punjab Bureau of Statistics Planning and Development Board confirmed this.

Sampling Technique

Probability and non-probability sampling methods exist (Espejo et al., 2024). The chance of any member being picked for a sample cannot be computed in non-probability sampling (Teodoro et al., 2024). Non-probability sampling depends on the researcher's subjective assessment, whereas probability sampling uses random selection (Shen et al., 2024). This study will undertake non-probability and convenience sampling of the purposive type.

Sample Size

To assess the study's reliability and validity, researchers will consider 500 people. For populations above 10 million advocate factor analysis on at least 384 individuals to assure dependability (Krejcie & Morgan, 1970). Limited resources and time render higher sample sizes meaningless (Gunawan et al., 2024). Based on the EFA and CFA results, the validation study. It was found that a 400–500 sample size is sufficient for the relevant studies (Alfakhry, Kodmani, & Almasri, 2024). These studies confirmed the study's findings validated instrument scales with 400–500 participants (Kim et al., 2025). We validated an instrument scale using these experiments. These investigations tested Ale document scale reliability. These studies imply a 400–500-person sample size may provide trustworthy and accurate findings. Participants will get the permission form and information page before doing the questionnaire. A sample size will be 500 people for this investigation.

Table 7: Hospitals selection criteria

Morgan Degasser (2011) recommends hospitals with at least 12 major departments, such as

Outpatient department (OPD)	Inpatient service (IP)	Medical department	Nursing department	Paramedical department
Physical medicine and rehabilitation department	Operation theater complex (OT)	Pharmacy department	Radiology department (X-ray)	Dietary department
Medical record department (MRD)	Personnel department.	Anesthesia	Dermatology	Medicine
Nephrology	Neurology	Neuroradiology	Neurosurgery	Gynecology.

Source: pshealthpunjab.gov.pk (2025)

Collection Techniques for Samples

This research uses hospital and responder sampling. Since responses are dynamic, stratified random selection is essential to represent hospital workers and patients of both genders. We will ensure the sample represents doctors, nurses, and paramedics. Intelligibility is explained sequentially: Pakistan's provinces are Punjab, KPK, Balochistan, and Sindh. Researcher will pick Punjab for the research because it is the biggest province by population. A random sample was

taken. Punjab is noted for its high population density and diverse income, ethnicity, geography, demography, behavior, and response. We choose four cities from the population and split the sample into public and private hospitals. The third stage follows population selection. Literature and practice indicate that public hospital professionals behave consistently. Private healthcare staff behave consistently. Responders are randomly chosen in the fourth phase after hospitals. This selection must include doctors, nurses, and paramedics. A list of registered medical staff will randomly choose answers.

Conclusion

The fundamental concepts and theoretical framework that underpin the study are examined in this paper. The many parts are examined in depth in relation to the social exchange theory in this paper. Patient satisfaction is impacted by human resource practices (e.g., workload, competency, training and development, job insecurity, perceived service quality), and this is explained in detail, along with the components' meanings and significance, and the connection between these practices and patient satisfaction. Beyond this, it investigates into where these concepts came from and what consequences they have had. In order to accomplish its goals, the study can be investigated the correlations between the variables and test the hypotheses that have been created based on the information presented in this paper. Improving medical staff productivity and patient happiness are the primary goals of this study. This will be accomplished by the utilization of psychological empowerment, job satisfaction, organizational commitment, and quality of work life in the study.

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