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UNVEILING THE ESSENCE OF HEALTHCARE STAFF TRAINING, STAFF PERFORMANCE, AND PATIENT SATISFACTION IN THE HEALTHCARE SECTOR OF PAKISTAN

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ABSTRACT

Well-trained healthcare staff are essential for meeting patient needs and improving satisfaction. In Pakistan, challenges such as disease burden, limited resources, and population growth underscore the urgency of workforce development. A shortage of skilled professionals, particularly in rural areas, exacerbates care disparities and patient dissatisfaction. This investigation was conducted at Allied Hospital, the largest public-sector hospital in Faisalabad Division, affiliated with Faisalabad Medical University. The study employed a purposive sampling technique and a cross-sectional design for data collection. A total of 348 valid questionnaires were completed and analyzed, achieving an impressive response rate of approximately 72%. Data analysis was performed by using Partial Least Squares Structural Equation Modeling (PLS-SEM), with mediation effects examined through the Baron & Kenny (1998) four-step approach. The findings confirm that healthcare staff training (HST) significantly enhances both staff performance (SP) and patient satisfaction (PS). A well-trained workforce improves service quality, thereby fostering greater patient satisfaction. Additionally, staff performance partially mediates the relationship between HST and PS, underscoring its critical role in the healthcare sector. Aligned with Human Capital Theory, these results emphasize that investing in staff development strengthens human capital, leading to improved organizational efficiency and patient care. Healthcare institutions must prioritize continuous training and performance management to ensure sustainable advancements in service delivery and patient satisfaction

Keywords: *Healthcare staff training, Staff performance, Patient satisfaction, Human Capital Theory*

INTRODUCTION

In the intricate tapestry of healthcare, the role of well-trained staff emerges as a cornerstone for meeting patient demands and enhancing overall satisfaction (Emon et al., 2023; Gautam & Shankar, 2023). This is particularly critical in Pakistan, a nation grappling with unique healthcare challenges that amplify the urgency of addressing workforce development. The country's healthcare system is marked by persistent unmet needs, especially in rural areas, despite the expansion of public health facilities (Farooq & Usman, 2023). Pakistan stands at 154th position among 195 countries in healthcare quality

and accessibility, lagging significantly behind India (145th), China (48th), Sri Lanka (71st), Bangladesh (133rd), and Bhutan (134th) (Chaudhry & Khan, 2020). Meanwhile, the private sector, serving nearly 70% of the population, grapples with regulatory inconsistencies and variations in service quality (Chaudhry & Khan, 2020). As per a recent report, only 121,245 nurses serving a population of 229 million and healthcare expenditures falling below World Health Organization (WHO) recommendations, Pakistan's healthcare system is under immense strain (World Bank, 2023; Economic Survey of Pakistan, 2020–21). Compounding these issues is a severe shortage of trained nurses, a gap that continues to widen amidst a rapidly growing population (Banks, 2024). Addressing these challenges requires not only infrastructural and financial investments but also a strategic focus on human capital development, as underscored by Human Capital Theory. Human Capital Theory posits those investments in education, training, and skill development yield significant returns in the form of improved productivity, efficiency, and overall organizational performance (Becker, 1964). In the context of healthcare, this theory provides a compelling framework for understanding how staff training can serve as a catalyst for enhancing both employee performance and patient satisfaction. Training, as Weaver (2014) eloquently describes, acts as the virtuoso conductor in the symphony of healthcare, harmonizing the competence and attitudes of healthcare workers to foster a culture of positivity, efficiency, and unwavering commitment to excellence. This alignment is critical, as it directly translates into improved patient outcomes, enhanced safety, and greater operational efficiency (Zuraidah & Simamora, 2022; Abdelhamied, 2019). For instance, Thom et al., (1998) demonstrated that customer service training for healthcare staff led to significant improvements in emergency departments, including reduced patient complaints and increased commendations. Such outcomes highlight the tangible benefits of investing in human capital, reinforcing the theory's relevance to healthcare systems.

However, much of the existing evidence on the impact of training originates from sectors outside healthcare, leaving a critical knowledge gap regarding the specific dynamics of Pakistan's healthcare system. This gap is particularly pronounced when considering the mediating role of staff performance in the relationship between training and patient satisfaction. Patient satisfaction, as Bostan, Acuner & Yilmaz (2007) highlighted, is a multifaceted construct encompassing the quality of medical care, communication effectiveness, accessibility, staff attitudes, and the overall healthcare environment. Meeting or exceeding patient expectations is intrinsically linked to satisfaction, which serves as a key measure of healthcare facility performance rather than a mere numerical metric (Berenson, Pronovost & Krumholz, 2013). The study has two primary objectives:

1) Explore the relationship between healthcare staff training and patient satisfaction
2) Investigating the mediating impact of Staff Performance on the relationship between healthcare staff training and patient satisfaction

By integrating Human Capital Theory into this discourse, the proposed study aspires to contribute to a deeper understanding of these dynamics, offering actionable insights and recommendations to strengthen Pakistan's healthcare system. By weaving together, the threads of training, performance, and satisfaction, it seeks to create a narrative that not only addresses existing gaps but also transforms the complexion of healthcare in Pakistan.

Problem Statement

Pakistan's healthcare system faces critical challenges, including a severe shortage of trained staff, regulatory inconsistencies, and unmet patient needs. Human Capital Theory emphasizes that investments in education and training enhance productivity and performance. However, existing research primarily focuses on non-healthcare sectors, leaving a gap in understanding the role of staff training in improving patient satisfaction within Pakistan's healthcare system. Particularly, the mediating impact of staff performance on this relationship remains underexplored. This study aims to bridge this gap by examining how healthcare staff training influences patient satisfaction through enhanced staff performance. By integrating Human Capital Theory, it seeks to provide insights that can inform policies and strategies for improving healthcare service delivery in Pakistan.

1. Literature Review

2.1.1 Healthcare Staff Training (HST)

A well-functioning healthcare team, comprising physicians, nurses, surgeons, and specialists, relies heavily on training, as it fosters a positive work environment and enhances team cohesion (Ogbonnaya et al., 2018). High-quality healthcare services depend on the delivery of exceptional patient care, which can only be achieved by well-trained professionals. Haleem et al., (2022) emphasize that training not only improves individual skills and knowledge but also significantly enhances patient care, safety, and the overall efficiency of healthcare delivery. Gandrita, (2023) further highlights the numerous benefits of training, including increased productivity, shorter learning curves, improved attitudes, better collaboration, greater employee loyalty, and the fulfillment of human resource planning objectives. Additionally, training reduces workplace accidents and promotes personal growth among staff members. By keeping healthcare professionals updated on best practices, helping them adapt to new technologies, and fostering effective teamwork, training elevates the quality of healthcare services provided (Chakraborty et al., 2021).

2.1.2 Patient Satisfaction (PS)

In today's commercial environment, the healthcare industry views patients as valued clients who should be treated with the highest regard. The concept of patient satisfaction (PS) is crucial for understanding the role of patients as beneficiaries or users of healthcare services. PS is defined as the measure that examines the gaps between patients' expectations of healthcare services and their actual experiences (Naidu, 2009). It is widely recognized as one of the most significant indicators of healthcare service quality (Andaleeb et al., 2007). Therefore, improving quality in the context of patient satisfaction requires a thorough investigation of patients' experiences during service delivery (Naidu, 2009). Satisfied patients contribute to better healthcare outcomes, as their satisfaction encourages adherence to treatment plans and promotes positive word-of-mouth about the healthcare provider (Cheng et al., 2003). Patients report higher levels of satisfaction when they receive appropriate and effective treatment following a diagnosis (Shah et al., 2021). The key determinants of PS are often linked to doctor-related factors, such as the doctor's attitude, the behavior of nurses, and the conduct of other medical staff (Hwang et al., 2021; Shah et al., 2021). Additionally, a doctor's knowledge and skills are critical components of a healthcare organization's success (Park et al., 2021).

2.1.3 Staff Performance (SP)

According to Daryanto (2017), performance is the willingness and commitment of individuals or groups to execute tasks effectively, achieving expected outcomes. It reflects the results of one's efforts in completing assigned duties by utilizing available resources efficiently. Employee performance, or work achievement, encompasses both qualitative and quantitative outputs in fulfilling responsibilities (Alzoubi et al., 2021). And is measured through productivity, efficiency, and adherence to organizational standards.

2.2 Underpinning theory and Hypothesis development

Human capital development theory (HCT)

Human Capital Development Theory is an economic concept that emphasizes the value of investing in individuals' skills, knowledge, and abilities to enhance their productivity and contribute to economic growth. Introduced by Gary Becker in the 1960s, the theory posits that education, training, and health are critical forms of investment in human capital, which yield long-term benefits for both individuals and society (Becker, 1964). In the context of healthcare, this theory underscores the importance of training and developing healthcare professionals to improve their performance, efficiency, and ability to deliver high-quality care. By investing in staff training, healthcare organizations can enhance the competence and confidence of their workforce, leading to better patient outcomes, increased satisfaction, and overall system efficiency. However, for human capital investments to be effective, they must be tailored to the specific needs and challenges of the context. In Pakistan, for example, applying this theory requires addressing systemic issues such as staff shortages, inadequate training infrastructure, and urban-rural disparities. Without these adjustments, the potential benefits of human capital development may remain unrealized,

highlighting the need for targeted and context-specific strategies.

2.2.1 Relationship between healthcare staff training and patient satisfaction.

In today's rapidly evolving business landscape, the healthcare industry has come to recognize patients as vital clients, placing a strong emphasis on customer and patient satisfaction (Sinyiza et al., 2022). A well-trained and compassionate healthcare staff is often the cornerstone of achieving patient satisfaction that not only meets but exceeds service standards (Ambrosio, 2020; Shelton, 2000). Initiatives aimed at enhancing customer service in healthcare have gained significant traction as a means to improve patient satisfaction, as highlighted by Banka et al., (2015) and Buonomo et al., (2022). The importance of training in elevating service quality is not limited to healthcare; Waqanimaravu & Arasanmi, (2020) demonstrated its transformative role in the hotel industry, while Ji-Yeon et al. (2018) found that ground crew training in the airline sector significantly boosts service quality, thereby enhancing customer satisfaction. Similarly, Frida et al., (2014) analyzed communication skills training (CST) for medical staff and revealed a variety of approaches, most of which positively influenced patient satisfaction and health outcomes. Empirical studies, such as those by Thom et al., (1998) and Chaichi (2012), further underscore the value of training, with the former reporting significant improvements in emergency department quality metrics and the latter linking staff training in responsiveness and empathy to higher client satisfaction in travel agencies. Dimensions such as tangibles, reliability, responsiveness, assurance, and empathy have been extensively studied across industries, including higher education (Oldfield & Baron, 2000; Rasli, Shekarchizadeh & Iqbal, 2012), banking (Ladhari, 2009), hospitality (Marković & Raspor, 2010), and healthcare (Babakus & Mangold, 1992). Still, their application in the healthcare sector, especially among developing countries like Pakistan, remains unexplored.

The existing literature predominantly focuses on global contexts, often neglecting the unique cultural, economic, and infrastructural challenges faced by Pakistan's healthcare system. This study seeks to bridge these gaps by investigating the interplay between staff training and patient satisfaction within Pakistan's healthcare sector. Thus, we propose the following hypothesis;

H1: Healthcare staff training is significantly and positively influencing patient satisfaction.

2.2.2 Relationship between healthcare staff training and staff performance.

An employee's performance is improved via training. Initiatives for staff training help to cultivate a positive mindset (Bilderback, 2024). It is a crucial component of organizational initiatives meant to improve workers' attitudes and competences in line with organizational goals (Choi, 2011). The benefits of training are highlighted by Simamora (2022), who lists increased output, shorter learning curves, better attitudes, collaboration, loyalty, and human resource planning fulfilment in addition to decreased accident rates and employee personal growth. According to Madavi et al., (2022) It is crucial to give employees training opportunities since well-trained employees may contribute to organizational achievement more successfully. This saves time and corporate resources in addition to improving performance. In work environments, human resource managers are essential in upholding high-performance standards and resolving employee concerns in order to guarantee alignment with the goals and mission of the organization (Mothafar et al., 2022). When taken as a whole, these studies improve understanding of the complex link that exists between customer satisfaction, performance, and staff training in a variety of sectors. Supervisors that place a high priority on employee development actively engage in the orientation and training procedures, stressing the value of personnel development (Salas et al., 2012). There is a research vacuum in Pakistan's healthcare industry since not many studies have looked at the impact of staff training on patient satisfaction. Most of the material published today ignores employee satisfaction with on-the-job training in favor of training and customer satisfaction. To close this gap, the suggested study which is based on "The Learning Edge" (Wick & Leon, 1993) introduces three subscales that gauge employee attitudes, organizational support, and training satisfaction. The study offers customized insights to improve training procedures in the healthcare sector by exploring employee viewpoints, which will eventually affect

patient satisfaction and organizational performance. Therefore, more research in this field would offer insightful information about how to best implement training programs for improved performance from healthcare personnel. Therefore, we posit that.

H2: Healthcare staff training is significantly and positively influencing staff performance.

2.2.3 Relationship between Healthcare Staff Training, Staff Performance and Patient Satisfaction

Well-trained staff demonstrate enhanced competencies, communication skills, and problem-solving abilities, which directly improve their performance (Alabi, 2024). For example, a nurse who communicates effectively and administers care compassionately creates a positive patient experience, boosting satisfaction (Ferreira et al., 2023). Similarly, physicians trained in patient-centered care build trust and reassurance, further enhancing satisfaction (Campos et al., 2024). Training equips healthcare professionals with the skills and knowledge needed to excel, but it is through improved performance that these benefits translate into higher patient satisfaction (Elendu et al., 2024). Moreover, staff performance bridges training and satisfaction by ensuring theoretical knowledge is applied practically, fostering accountability, and reducing errors (Abdelhamied, 2023; Indarwati et al., 2021). Patients feel valued when interacting with competent and attentive staff, shaping their overall perception of care quality (Sofaer & Firminger,2005). Thus, staff performance is the critical link between training and satisfaction. Healthcare institutions must invest in training while fostering environments that sustain high performance through ongoing development and recognition (Karan et al., 2021). By addressing performance gaps and monitoring outcomes, healthcare systems can create a cycle of continuous improvement, ultimately enhancing patient satisfaction (Campos et al., 2024). Existing research often overlooks how training can improve staff performance and patient satisfaction in Pakistan where healthcare quality is disproportionately low (Naher, 2020). There is also limited evidence on the effectiveness of context-specific training programs tailored to Pakistan's needs. Addressing these gaps is crucial to developing actionable strategies for improving healthcare delivery and patient outcomes in the country.

H3: Healthcare staff performance positively and significantly influence patient satisfaction.

H4: Healthcare staff performance mediates the relationship between healthcare staff training and patient satisfaction.

2.3 Theoretical framework

This study is grounded in **Human Capital Development Theory**, which posits that investments in training enhance the skills and competencies of healthcare staff, leading to improved performance and, ultimately, higher patient satisfaction. The proposed framework incorporates **staff performance** as a mediator between healthcare staff training and patient satisfaction. This mediation model is consistent with HCD Theory, which posits that training (investment in human capital) leads to improved performance, which in turn enhances outcomes (patient satisfaction). The proposed framework is illustrated below: See Figure 1.

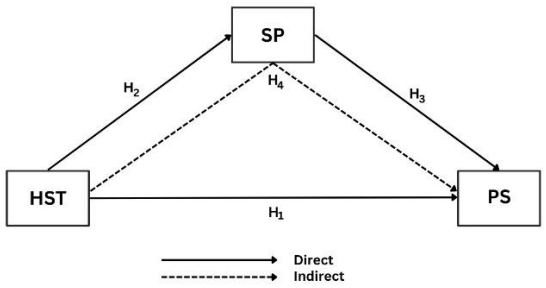

Figure:1

2. Research Methodology

This quantitative study seeks to objectively investigate the influence of Healthcare Staff Training (HST) on Patient Satisfaction (PS), with a particular emphasis on the mediating function of Staff Performance (SP). The investigation was carried out at the Faisalabad Division's largest public sector hospital, Allied Hospital. The hospital, associated with Faisalabad Medical University and used as a teaching facility, has a capacity of 1,450 beds. The study used a purposive sample strategy and a cross-sectional format for data gathering. A total of 348 completed valid questionnaires have been returned for analysis, reflecting an exceptional response rate of about 72%, which is regarded appropriate according to Baruch &

Holtom's criterion (2008). Permanent personnel were the primary audience, and measuring scales for HST, EP, and PS were adopted from known sources. Wick & Leon, (1993) devised the HST evaluation scale, whereas Kessler et al., (2004) adopted the Employee Performance scale. Grogan et al., 2000) scale was used to assess patient satisfaction. The study used structural equation modelling (SEM), a commonly used statistical approach in behavioral research (Zhou et al., 2021). PLS-SEM was chosen due to its resistance to collinearity and data distribution issues, as well as its adaptability to non-normally distributed data and complex relationship models, recognizing its ability to address limitations associated with multiple regression (Fornell, 1982) and support various constructs (Hair et al., 2011). Whereas Baron & Kenny (1996) 4-step mediation technique has been used to analyze the data.

3. Results and Discussions

4.1 Measurement of model

Anderson and Gerbing (1988) emphasize the importance of convergent validity, discriminant validity, and construct reliability in the measurement model. Convergent validity, which refers to high correlations between instruments assessing the same idea (Sekaran & Bougie, 2016), is assessed using outer loadings and average variance extracted (AVE). Crandall et al. (2020) provide cutoffs for outer loadings ranging from 0.32 (bad) to 0.71 (good), although Hair et al., (2006) urges a narrower threshold of 0.5 or higher, ideally 0.7. Construct reliability, as measured by Cronbach's alpha (CA) and composite reliability (CR), above the acceptable 0.70 level. CA values varied from 0.785 to 0.932, whereas CR values ranged from 0.886 to 0.932 (Hair et al., 2017). Likewise, AVE values of 0.608 to 0.807 confirmed convergent validity (Hair et al., 2017). Table 1 shows the measuring model for Healthcare Staff Training (HST), Patient Satisfaction (PS), and Employee Performance (EP), which demonstrates strong correlations, reliability, and validity.

Table 1: Measurement model

Construct	Items	Loading value (> 0.5)	Cronbach's Alphah (> 0.7)	Composite reliability (> 0.7)	Average variance extracted (> 0.5)
HST			**0.804**	**0.885**	**0.719**
	TF	0.860			
	TS	0.828			
	TSP	0.856			
SP			**0.817**	**0.862**	**0.511**
	SP1	0.679			
	SP2	0.657			
	SP3	0.731			
	SP4	0.746			
	SP5	0.754			
	SP6	0.718			
PS			**0.845**	**0.896**	**0.683**
	PS1	0.861			
	PS2	0.812			
	PS3	0.842			
	PS4	0.789			

4.2 Discriminant validity

Discriminant validity was thoroughly evaluated using both the Fornell and Larcker criteria and the HTMT approach. Hair et al., (2017) used the Fornell and Larcker ratio to ensure that the square root of Average Variance Extracted (AVE) consistently exceeded the correlation values across the various study topics, hence establishing discriminant validity. Moreover, the HTMT approach, developed by Henseler et al., (2015), improved discriminant validity by estimating the ratio of correlations within and between components. Notably, the highest

recorded square root value, 0.985 (see Table 3), exceeds the criterion defined by Franke & Sarstedt (2019), giving strong validation of discriminant validity. Overall, these findings support the uniqueness of the study constructs Healthcare Staff Training (HST), Patient Satisfaction (PS), and Employee Performance (EP) within the measuring model.

Table: 2 Fornell-Larcker criterion

	HST	EP	PS
HST	0.848		
EP	0.777	0.715	
PS	0.813	0.716	0.827

Table: 3 Heterotrait-monotrait ratio (HTMT) - Matrix

	HST	EP	PS
HST		0.888	0.985
EP		0.806	
PS			

4.3 Results of Hypothesis

After the validity and reliability of the measurement model were confirmed, the structural model was analyzed to evaluate the hypotheses.

Table :4 Mean, STDEV, T values, p-values

Hypothesis	Effects	Paths as per Barron and Kenny	Original sample (β)	Sample mean (M)	Standard deviation (STDEV)	T statistic (t >1.96)	P values (p<0.05)	Results
H1	HST -> PS	C	0.647	0.224	0.073	8.830	**0.000**	**Supported**
H2	HST-> SP	A	0.777	0.780	0.033	23.389	**0.000**	**Supported**
H3	SP-> PS	B	0.213	0.224	0.061	3.494	**0.000**	**Supported**
H4	HST-> SP->PS	c'	0.166	0.175	0.049	3.356	**0.001**	**Supported**

The statistical information for mean values, standard deviations, t-values, and p-values for the different research routes and hypotheses is shown in Table 4 using the Barron and Kenny technique. The links between Patient Satisfaction (PS), Staff Performance (SP), and Healthcare Staff Training (HST) are examined in each row, which relates to a certain hypothesis (H1, H2, H3, H4). Estimated coefficients are provided by the Original Sample (β), mean values are provided by the Sample Mean (M), and the variability for each path is shown by the Standard Deviation (STDEV). P numbers indicate the probability of observing such values if the null hypothesis is true, whereas T statistical values indicate how much estimates deviate from the null hypothesis. P-values less than 0.05 and t-values more than 1.96 demonstrate the support for all hypotheses and attest to the statistical significance of the connections under investigation within the parameters of the investigation.

3.4 The Mediation Analysis

The Baron and Kenny (1986) technique for mediation consists of four sequential processes, as seen in Figure 2. First and foremost, there must be a substantial correlation between the independent and dependent variables. Second, there must be a significant relationship between the independent variable and the proposed mediating variable.

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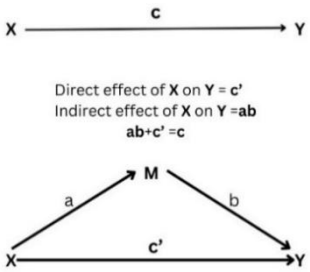

Figure: 2

Third, in a model in which both independent and mediating factors predict the dependent variable, the mediating variable must have a meaningful relationship with the dependent variable. Finally, the coefficient of the independent variable in the model containing both the independent and mediating factors must be greater (in absolute value) than the coefficient in the model excluding the mediating variable. The mathematical explanation is as follows.

Total Effect (c path):

$Y=\beta 0 + \beta 1X + \epsilon$

Direct Effect (c' path):

$Y=\gamma 0 + \gamma 1X + \gamma 2M + \epsilon$

Mediation Effect (a * b path):

$M=\alpha 0+\alpha 1X+\zeta$

$Y=\delta 0+\delta 1M+\delta 2X+\epsilon$

Here:

X represents the independent variable (HST),

Y is the dependent variable (PS),

M is the mediator (EP),

$1\beta 1$ is the path coefficient for the effect of HST on PS (c path),

$1\gamma 1$ is the path coefficient for the direct effect of HST on PS after controlling for the mediator (c' path),

$1\alpha 1$ is the path coefficient for the effect of HST on EP (a path),

$1\delta 1$ is the path coefficient for the effect of EP on PS (b path).

The mediation effect is given by the product of the coefficients for a path ($1\alpha 1$) and b path ($1\delta 1$), i.e., $1\times 1\alpha 1\times \delta 1$.

This framework allows to assess whether the relationship between HST (X) and PS (Y) is mediated by EP (M). If the product of $1\times 1\alpha 1\times \delta 1$ is statistically significant, it suggests mediation.

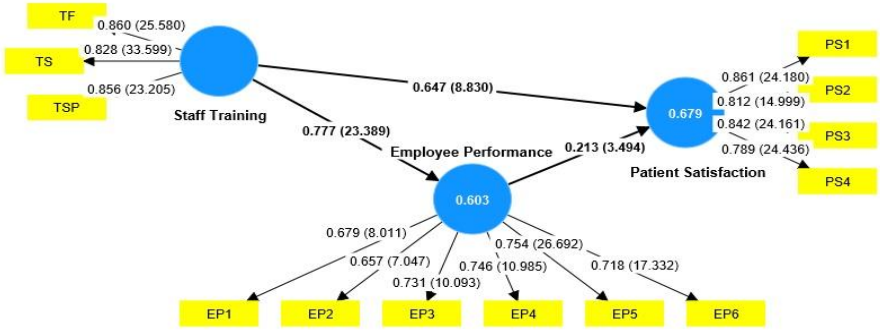

Figure: 3

To investigate the indirect implications of these linkages, the bootstrapping approach was used to compute confidence intervals (CIs) for indirect associations. The study found that Staff Performance (SP) has a substantial indirect influence on the relationship between Healthcare Staff Training (HST) and Patient Satisfaction (PS) ($\beta = 0.166$, $T = 3.356$, $p < 0.05$).

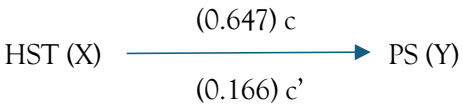

Figure: 4

Table 4 and Figure 4 show that using SP as a mediator reduces the influence of HST on PS, from $\beta = 0.647$ to $\beta = 0.166$. Despite the decline, the connection remains statistically significant. As a result, staff performance is found as a partial mediator in the relationship between HST and PS, consistent with Baron & Kenny's 1986 model. As a result, EP is recognized as an effective mediator, meeting the four-step technique outlined by Barron and Kenny (1986), as shown in Figure 2.

4. Discussion

H1: Healthcare staff training significantly and positively influences patient satisfaction. The

investigation of the direct link between HST and PS (denoted as "c") revealed a significant and positive beta coefficient (β = 0.647). The T statistic of 8.830 ($p < 0.05$) provides strong support for H1. As a result, the data indicate a significant relationship between increased healthcare worker training and higher levels of patient satisfaction. These findings support previous studies, confirming the favorable influence of staff training on patient satisfaction. Mulder, (2001), Chaichi (2012), and Abdelhamied (2023) have all reported similar conclusions, confirming the consistency and reliability of our findings. In a comparable manner Paek & Lee, (2018) and Theodoros et al., (2017) demonstrate that education and training improve service quality and customer satisfaction. Recognizing the importance of continual staff development, healthcare managers prioritize improvement via active participation and training (Tiwari, 2011), emphasizing the critical role of a trained and compassionate healthcare workforce in guaranteeing patient satisfaction. Similarly, rigorous human resource selection, training, and staff engagement activities are related to greater customer satisfaction (Van Iddekinge et al., 2009; Crook et al., 2011; Salanova et al., 2005). Tsironis, (2020) also suggests extensive training, feedback, and incentives to increase customer satisfaction. As a result, the findings not only add to the current body of knowledge but also confirm and broaden our understanding of the critical role that healthcare worker training plays in improving patient satisfaction. The consistency of these findings with worldwide studies highlights the universal need to prioritize staff training for enhanced healthcare quality. The findings reinforce Human Capital Theory by demonstrating that investments in staff training enhance human capital, which subsequently improves patient satisfaction.

Hypothesis 2: **Healthcare staff training significantly and positively influences staff performance.** The findings significantly confirm the association (β = 0.777, t = 23.389, $p < 0.05$). This demonstrates that increased healthcare staff training is substantially associated with better employee performance. The findings are consistent with previous research, including studies by Ahmad & Manzoor (2017), Dewanti & Artaya (2019) and Athar & Shah (2015) which validate the worldwide resonance of the observed connection between training and staff performance. In the context of Pakistan, where healthcare challenges are acute, these findings advocate for strategic investments in staff training to improve overall workforce effectiveness, potentially addressing performance gaps in healthcare delivery, because a well-trained workforce is critical to organizational success, necessitating continuous training to optimize performance. The findings reinforce Human Capital Theory by demonstrating that investments in staff training enhance human capital, which subsequently improves staff performance. This linkage underscores the critical role of human capital as a driver of organizational effectiveness and highlights the need for healthcare institutions to prioritize both training and performance-enhancing practices to achieve sustainable improvements in patient care outcomes.

The data confirm **Hypothesis 3, which states that healthcare staff performance has a positive and statistically significant impact on patient satisfaction** (β = 0.213, t = 3.494, $p < 0.05$). This suggests that improved employee performance is related to increased patient satisfaction. These findings are consistent with previous studies by Sacks et al. (2015) and Lee et al. (2012) emphasizing the relevance of good staff performance in influencing Patient Satisfaction. Patients gain from skilled healthcare professionals who not only have the essential abilities, but also show civility, thoughtfulness, and respect, which increases satisfaction (Shaw et al., 2005; Thiedke, 2007; Rathert et al., 2012). Compassionate care, involving empathy and personalized therapy, helps to enhance results (Shaw et al., 2005). In Pakistan, where healthcare inequities persist, our findings highlight the potential benefit of concentrating on and enhancing personnel performance to increase overall patient satisfaction.

The study found a positive and statistically significant mediated impact (β = 0.166, t = 3.356, $p < 0.05$), supporting **Hypothesis 4**. This means that the effect of healthcare staff training on patient satisfaction is partially mediated by staff performance, underscoring the importance of staff performance as a mediator in this connection. Table 4 and Figure 4 show that adding staff performance as a mediator reduces the direct influence of HST on PS from β = 0.647 to β = 0.166. Regardless of the decline, the connection remains statistically significant. As a result, staff

performance is found as a partial mediator in the relationship between HST and PS, consistent with Baron & Kenny's 1986 model. Thus, Staff Performance is recognized as an effective mediator, meeting Barron and Kenny's (1986) four-step strategy, as shown in Figure 3. Thus, staff performance is the critical link between training and satisfaction. Healthcare institutions must invest in training while fostering environments that sustain high performance through ongoing development and recognition (Karan et al., 2021). By addressing performance gaps and monitoring outcomes, healthcare systems can create a cycle of continuous improvement, ultimately enhancing patient satisfaction (Campos et al., 2024). The results align with Human Capital Theory (HCT), which asserts that investing in employee skills through training enhances both individual and organizational performance, consequently increasing patient satisfaction.

5. Practical implications

In Pakistan's healthcare system, the report recommends focused expenditures in region-specific staff training programs that address language and cultural issues. Continuous professional development programs, which emphasize the relationship between training and employee performance, are critical. Incorporating patient satisfaction indicators into employee assessments is advised to promote patient-centered treatment. The study calls for a more nuanced, context-specific strategy, acknowledging the critical role of staff performance in improving patient satisfaction. Continuous metric monitoring and collaboration among healthcare facilities, as well as policy lobbying for continuous training, are critical to developing Pakistan's robust and flexible healthcare system.

6. Limitations of the study

The study, which focused on Allied Hospital in Faisalabad Division, Pakistan, had certain limitations worth mentioning. Because of the single-site emphasis, its findings may be limited in scope. The cross-sectional design makes it difficult to show causality, and using only quantitative tools may ignore qualitative nuances in healthcare dynamics. Purposive sampling involves possible selection bias, which affects representativeness. Regional distinctiveness reduces generalizability throughout Pakistan's heterogeneous healthcare scene. The study employs Barron and Kenny's (1986) mediation technique instead of the more recent approach by Preacher & Hayes (2008). Despite this limitation, it provides valuable context-specific insights into the complex relationships between healthcare personnel training, performance, and patient satisfaction.

7. Conclusion

This study confirms that healthcare staff training (HST) significantly enhances both staff performance (SP) and patient satisfaction (PS). A well-trained workforce improves service quality, fostering better patient satisfaction. Additionally, staff performance partially mediates the HST-PS relationship, highlighting its critical role in healthcare sector. Aligned with Human Capital Theory, these findings emphasize that investing in staff development strengthens human capital, leading to improved organizational efficiency and patient care. Healthcare institutions must prioritize continuous training and performance management to ensure sustainable improvements in service delivery and patient satisfaction. By fostering continuous professional development, recognition, and support, healthcare institutions can maximize the returns on their training investments, as predicted by HCT. These findings provide vital insights into the dynamics of Pakistan's healthcare industry, highlighting the interdependence of training, performance, and satisfaction of patients.

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