

# Anomalies of the Healthcare Sector Using Workplace Safety and Job Satisfaction: A Case Study of Pakistan

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## Abstract

This study aims to investigate the impact of workplace safety on doctors' retention and turnover intention along with job satisfaction as the mediator. A questionnaire-based survey was conducted with 394 medical doctors working in thirty-five hospitals in Pakistan using a structural equation modeling. Results of the study showed that: 1) workplace safety has a significant positive relationship with employee retention; 2) workplace safety has a significant negative relationship with turnover intention; 3) workplace safety has a significant positive relationship with job satisfaction; 4) job satisfaction has a significant positive relationship with employee retention; 5) job satisfaction has a significant positive relationship with turnover intentions; 6) job satisfaction mediates between workplace safety and employee retention; while 7) job satisfaction failed to mediate between workplace safety and turnover intentions. The findings of the study suggest that in a fear-free and safe environment, employees' chance to stay will increase. The study also suggests that dissatisfied employees do not need to leave the organization. There can be other factors that can be explored in future studies. This study also provides a practical implication for the doctors' low retention and high turnover, specifically in the healthcare sector of Pakistan by providing guidelines to the human resource executives to focus on the strategic implementation of workplace safety.

**Keywords:** Employee Retention, Turnover Intention, Workplace Safety, Social Exchange Theory, Healthcare, Pakistan

**JEL Classification Code:** I18, C91, J28

## 1. Introduction

Despite acknowledging the importance of healthcare around the world, the recent outbreak of the Covid-19 pandemic has proven that the healthcare systems across the world were inadequate to facilitate the patients. The situation has proven that no country has the capacity to deal with such outbreaks. For example, the developed countries like the USA, UK, Canada, Italy, and Japan failed to manage the emergency developed during the current pandemic

(Congressional Research Service, 2020). The situation in developing countries was worse than the developed countries as the former's healthcare systems were highly inadequate (Ali & Sayed, 2020; Aman-Ullah et al., 2020b). Therefore, countries under great pressure from their already ineffectual healthcare systems saw themselves losing more doctors as the healthcare professionals left to take up roles in developed countries to pursue a better career; their absence, unfortunately, was sorely felt in their own nations that desperately needed their professionals to stay and contribute to improve the crisis (Oladeji et al., 2016).

Pakistan is one of Asia's least developed nations, facing an acute shortage of doctors (Ali et al., 2019). Pakistan needs 436,000 doctors to actively participate in their healthcare on a regular basis. Unfortunately, they are short by 100,000 doctors, a significant number that burdens the current doctors with extra work. According to the Ministry of Labour (Pakistan), there was a sharp increase of doctors leaving Pakistan at 101% between 2018 and 2019, and it was predicted that there would be a rise in upcoming years. Furthermore, in Pakistan, the doctors-population ratio is lower than WHO minimum standard which is at (1:1000).

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Consequently, doctors who leave to work in developed countries directly impact the situation by creating a significant shortage of doctors. Mir et al. (2015) asserted that Pakistan faces an acute shortage of different cadres of healthcare workers, which is bound to escalate further because of the high population growth rate, inequitable distribution, and external migration of the healthcare workforce. This shortage contributes to the decrease in the retention rate and an increase in the turnover rate of doctors. The healthcare sector is crucial to the population's health and wellness; therefore, it only improves if the government revamps the healthcare system and brings the doctors-population ratio to an optimal level, with the current ratio being far below at 1:6,325 in Pakistan (Abdul Razak Shaikh, 2018).

Winterton (2004) stated that the most effective way to overcome the problems in the healthcare sector is by improving the retention rate and decreasing the turnover intentions among employees. Mir et al. (2015) asserted that employee retention determinants needed to be investigated in Pakistan's public hospitals as the retention rate there was markedly low. A few studies have been done in Pakistan to study the determinants of employee retention and turnover intentions, where, HR practices like recruitment, training and development, and commitment are the more frequently studied determinants in Pakistan (Aman-Ullah et al., 2020a).

Past research has shown success stories of organizations that focus on employee retention while developing organizational policies and management practices (Cho et al., 2006; Hinkin et al., 2000). Indeed, employee retention reduces not only employee shortage but also reduces the associated recruitment, selection, and hiring costs which is a big problem for every organization (Sanyal et al., 2020). With the passage of time, existing employees develop expertise, which will bring high competition and profits (Cho et al., 2006). Carefully designed and implemented employee retention programs are proven to be more effective than salary as they reduce costs and increase productivity (Simons et al., 2001). According to Hinkin et al. (2000) financially successful service sector organizations like Starbucks and Southwest Airlines achieved more success by focusing on employee retention and development.

In Pakistan, the healthcare sector provides over one-third share in total employment while it has a 54 percent share in GDP (Ahmed & Ahsan, 2011). In their annual report, the Ministry of Labour of Pakistan (2018–2019) informed that doctors were leaving Pakistan rapidly and their ratio was increasing at a high rate of 101%. They also predicted that this turnover ratio would increase in the upcoming years. Turnover is proven to be expensive for an organization as it has many associated costs which are well documented in the past literature (Hinkin et al., 2000; Simons et al., 2001). Roughly, it is estimated that with every employee turnover, an organization will lose 60 percent of its productivity (Hinkin et al., 2000). Employers try to fill the loss with inexperienced

employees. As a result, the work schedules of the existing employees also get disrupted due to the additional work of training new employees. Thus, employee retention and turnover are the most prominent problems of the healthcare sector in Pakistan (Mir et al., 2015).

For voluntary turnover, Steers and Mowday (1981) introduced a research model. In contrast, Price (1977) had a different opinion as he believed that job satisfaction and job opportunities are the prime reasons behind employee turnover. Recently, Hom et al. (2017) conducted a 100 years review and suggested future avenues of research on employee turnover. The concept of employee retention and turnover is under investigation since the 1990s, but most of the time, these concepts are considered separately. Moncarz et al. (2009) studied these concepts together in the lodging industry. However, until this time, such study has not been conducted in the healthcare industry. Based on the previous literature and on-the-ground situation, workplace safety is an important and frequently neglected problem of the healthcare sector. It has been proposed that safety can help in improving retention and reducing turnover intentions among healthcare employees.

Having access to safety is a basic element of human rights (Fallatah & Syed, 2018). Without feeling secure, employees do not develop any positive feelings about the organization and tend to leave the organization whenever possible. Access to safety has become healthcare professionals' biggest nightmare (Binmadi & Alblowi, 2019). According to WHO, violent acts such as physical assaults, threats of assault, verbal abuse, harassment, and being forced to work a certain way are common problems at workplaces, with some extreme cases of sexual abuse and murders. Safety in the workplace is the weakest in developing countries such as Pakistan. Till 2018, Pakistan was not having proper Acts related to safety in the workplace. In 2018, occupational safety law was introduced to protect against hazardous events at the workplace. However, still, no specific law exists that covers the widespread issue of violence in Pakistan. Safety is a big problem among healthcare organisations of Pakistan resulting in high incidents of violence in Pakistan. The majority of Pakistani doctors believe that the application of proper safety laws can help to lower violent events. According to Ahmed et al. (2018), 85% of doctors agreed that they confronted violence at least once at their workplace. One such example came from the Khyber Pakhtunkhwa (KPK) district of Pakistan, where a senior surgeon reported that he was beaten by the health minister for not providing him extra services. With the continuous fear of humiliation at workplace and absence of enough safety system, most of the doctors are leaving their jobs or migrating to different countries. Hence, it has led to low retention rate of doctors.

The purpose behind this study was to determine the impact of workplace safety on two important organizational factors: employee retention and turnover intention. Additionally, the

study attempted to expand the existing literature by adding job satisfaction as a mediator in the association between the three important organizational factors: workplace safety, employee retention, and turnover intention in Pakistan. A mediator was introduced in the present study based on some important cases. For instance, job satisfaction is an important component, and it has a strong impact on employee behavior (Emberland & Rundmo, 2010). In previous literature, job satisfaction showed a significant relationship with employee retention (De Sousa et al., 2018) as well as turnover intention (Wang et al., 2020). Furthermore, in light of the social exchange theory, workplace safety is a relevant attitude linked to job satisfaction (Huang et al., 2016). A person working in a safer place will be more satisfied and productive, subsequently improving retention and decreasing turnover intention. Job satisfaction helps in creating a bridge between workplace safety, employee retention, and turnover intention in a single model. Furthermore, we investigated job satisfaction as a mediator because very few studies have correlated workplace safety with job satisfaction, specifically in relation to employee retention and turnover intention. Therefore, we argued that the “workplace safety-job satisfaction-employee retention-turnover intention” formed a new pathway that would further contribute to the literature.

## 2. Literature Review and Hypothesis Development

### 2.1. Theoretical Framework Using Social Exchange Theory (SET)

While studying the employee retention and turnover intention, two basic questions arose: 1) why would an employee stay? and 2) Why would an employee decide to leave an organization? (Lee & Mitchell, 1994). Most of the models are developed based upon the seminal work by March and Simon (1959) related to ease and desirability during a decision-making process. According to March and Simon (1959), employees’ decision to participate in or withdraw from the organization is controlled by two forces: 1) push-to-leave, and 2) pull-to-stay. Furthermore, an employee’s decision to withdraw from the organization can be classified into two types as prevalent in previous literature of turnover: i) push-to-leave includes job dissatisfaction, and ii) pull-to-leave includes the availability of alternative job (Griffeth & Hom, 2001). However, there is one strong limitation to March and Simon’s framework of decision making; the existence of another force called pull-to-stay is an alternative perspective where employees are willing to stay (Mitchell et al., 2001). The pull-to-stay factor comes under the influence of the job embeddedness model since the force encourages employees to prolong their stay in the organization for work-related or

non-work-related reasons. For instance, the non-work-related factor can be family issues while work-related reasons can be safety at the workplace (Phillips & Connell, 2003). On the basis of the job embeddedness model, we argue that SET can be used to explain why and how the workplace safety is considered as the important pull-to-stay, push-to-leave, and pull-to-leave forces when developing employees’ intention to stay or leave the organisation. Under the influence of SET, employees’ voluntary actions are “motivated by the return they are expected to bring and typically do in fact bring from others” (Blau, 1964).

In recent years, a number of studies have been conducted on the impact of safety climate on injury-related outcomes. Studies on violence-related cases at the workplace and their impact on employee’s behavior are still lacking. Therefore, the present study used SET developed by Blau (1964) to draw a framework to explain how workplace safety affected the organizational outcomes and created changes in employee behavior, including employee retention and turnover. Further, SET also supports a safe climate (Dejoy et al., 2010). An organization’s showing their commitment towards employees through workplace safety works well under social exchange dynamics since employees react positively to the organizational support. Consequently, based on the SET, under workplace safety, when an employee feels protected against violence, the motivation and satisfaction will increase (Ayim-Gyekye, 2005). Furthermore, organizations with a positive safety climate are more likely to have employees with higher satisfaction, increasing retention and decreasing turnover (Huang et al., 2016). In the present study, two important factors affecting organizational performance are tested: 1) employee retention, and 2) turnover intentions. Workplace safety was considered as a possible remedy to these two issues whereas job satisfaction was considered as a mediator in this study.

### 2.2. Workplace Safety and Employee Retention

Workplace safety is defined as “an attribute of work systems reflecting the minimum likelihood of physical harm to a person at work” (Beus et al., 2016). According to (2019), employee safety is a vital concern of recent times as it has a strong impact on the future of the organization and the employees working there. Inline, Boakye-Dankwa et al. (2017) asserted that when organizations pay more focus on workplace safety, the chances of employee retention increase. According to Huang et al. (2016), the safety climate gives positive signals to employees that their organizations are concerned about their well-being as the organizations meet their safety needs. As a result, positive thoughts trigger their minds and they continue to stay. Similarly, past literature has advocated that workplace safety is positively associated with employee retention (Huang et al., 2016; Salman et al., 2016).

Thus, based on previous literature, we argued that workplace safety could influence employee retention in the healthcare sector of Pakistan.

*H1: Workplace safety has a significant positive relationship with employee retention.*

### 2.3. Workplace Safety and Turnover Intention

Safety is not a privilege but is a basic human right. Otherwise, a person will keep struggling in the same phase instead of moving forward (Esmailpour et al., 2011). Previous literature has shown that safety against violence is one of the major problems of the healthcare sector, causing damaging impacts on employees. In the organizational environment, workplace safety is a great concern as it strongly influences employees' behavior and organizational performance. The same study also found a significantly negative relationship between the presence of safety and turnover intention (Alipour et al., 2018). According to Smith (2018), the climate of safety contributes to job satisfaction, negatively affecting turnover intentions. Likewise, other researchers from the healthcare industry asserted that workplace safety was the most influencing determinant that resulted in turnover intentions among employees (Esmailpour et al., 2011).

*H2: Workplace safety has a significant negative relationship with turnover intention.*

### 2.4. Workplace Safety and Job Satisfaction

Employee safety is an important component that keeps employees committed and satisfied with their jobs. Organizational investment in employees in the form of occupational health and safety (OSH) practices helps organizations increase their employees' morale (Yusuf et al., 2012). In the previous literature, a number of scholars found a significant positive association between OHS and job satisfaction (Mihiravi & Perera, 2016). Consequently, aggression is the most commonly occurred threat faced by employees at the workplace, and it can be controlled through safety measures. Minimizing the aggression through proper safety measures would improve the satisfaction level and help limit the occurrence of violent attacks at the workplace. Besides that, Ayim-Gyekye (2005) found a significant positive relationship between workplace safety and job satisfaction. Therefore, we argued that job satisfaction and safety in the workplace were strongly correlated, leading to the third hypothesis tested in this study:

*H3: Workplace safety has a significant positive relationship with job satisfaction.*

### 2.5. Job Satisfaction and Employee Retention

Job satisfaction is the most important component of employee behavior (Clarke, 2010). Employee satisfaction cannot be ignored at the workplace as it has the ability to prolong the employees' tenure, which is critical to every organization (Clarke, 2010). Frey et al. (2013), found a significant positive relationship between job satisfaction and employee retention. However, satisfaction itself is only a feeling attached to other factors like work environment, salaries, and relationship with the organization, showing the strong influence on their intention to stay or leave the organization (Frye et al., 2019). Furthermore, De Sousa et al. (2018) affirmed that happy and satisfied employees always remain motivated, preferring to stay in one place and improving their progress.

*H4: Job satisfaction has a significant positive relationship with employee retention.*

### 2.6. Job Satisfaction and Turnover Intention

Turnover intention is the probability that an employee will leave an organization. When the goals of employees remain unaccomplished, employees feel emotionally exhausted, bringing dissatisfaction and causing high turnover intentions among employees (Wang et al., 2020). In the previous literature, job satisfaction forms a negative relationship with turnover intention. For example, Wang et al. (2020) found a significantly negative relationship between job satisfaction and high turnover intentions among healthcare employees in China, indicating that employees who were not satisfied with the organization tended to leave the organization. Similarly, Huang et al. (2016) found that when organizations took care of their employees, the latter responded positively; for example, the employee development in terms of training leads to high satisfaction and low turnover intention. Many studies from the past literature indicate that job satisfaction reduces turnover intentions among employees (Choi et al., 2014; Lamond et al., 2009).

*H5: Job satisfaction has a significant negative relationship with turnover intention.*

### 2.7. Mediating Role of Job Satisfaction

According to Locke (1976), "job satisfaction is a pleasurable or emotional state resulted from one's job experience". In other words, it is a key attitude of employee's behavior and their performance (Huang et al., 2016). Past literature indicates that people working in safer places are more satisfied and productive than those who work in an unsafe environment (Ayim-Gyekye, 2005). Meanwhile, job satisfaction also has a significant relationship with employee retention (Iqbal et al., 2017), and turnover intentions

(Wang et al., 2020). Based on SET, job satisfaction can be a possible reason for an employee to stay or leave an organization, and it can be improved by providing safety in the workplace (Cropanzano & Mitchell, 2005). Moreover, job satisfaction is fit to be studied as a mediator because it has significant relationships with workplace safety, employee retention, and turnover intention.

**H6:** Job satisfaction mediates the relationship between workplace safety and employee retention.

**H7:** Job satisfaction mediates the relationship between workplace safety and turnover intention.

### 3. Methodology

For the data collection, pre-tested questionnaires were taken from frequently used reliable sources and measured using a five-point Likert scale. For employee retention measurement, eleven items were taken from Kyndt et al. (2009), for turnover intention seven items were taken from Homburg et al. (2013), for workplace safety seven items were taken from Spector et al. (2007), and for job satisfaction five items were taken from Ackfeldt and Coote (2005). The reliability of all the constructs is above threshold level 0.70. Further, this study comprised a cross-sectional survey, showing a national representation of healthcare organizations of Pakistan, with the unit of analysis being doctors - postgraduate trainees, house officers, specialists, and journal practitioners". Data was collected from 6 randomly selected hospitals from each stratum namely: 1) Punjab, 2) Sindh, 3) Khyber Pakhtunkhwa, 4) Gilgit Baltistan, 5) Baluchistan, and 6) Azad Jammu and Kashmir. Total 394 doctors participated in this study with response rate of 79%. For the data analysis SPSS-v25 and smart-PLS-3.0 were applied. SPSS was used for initial processing of the data while smart-PLS was applied for measurement model and structural model analysis to test the validity, reliability and for hypotheses testing.

## 4. Results

### 4.1. Demographic

The demographic profile of the respondents is shown in Table 1. The results revealed that the majority were males (245 respondents; 62.2%) while 149 participants were females (37.8%). Furthermore, the majority of the participants were new entrant doctors (30.1%) of age 25 or below, followed by 36–45 years old (21.4%), 46–55 years old (18.8%), and 26–35 years old (18.1%). Most of the responses came from Punjab (42%), followed by Sindh (23%), Khyber Pakhtunkhwa (10.6%), Gilgit-Baltistan, and Fata (8.3%), and Baluchistan (9.6%) while AJK showed the lowest representation at 6.5%.

**Table 1:** Demographic Characteristics

| Demographics | Details                   | No. | (%)  |
|--------------|---------------------------|-----|------|
| Gender       | Female                    | 149 | 37.8 |
|              | Male                      | 245 | 62.2 |
|              | <b>Total</b>              | 394 | 100  |
| Age          | Under 25                  | 116 | 30.1 |
|              | 26–35                     | 70  | 18.1 |
|              | 36–45                     | 84  | 21.4 |
|              | 46–55                     | 74  | 18.8 |
|              | 56 and above              | 50  | 12.9 |
|              | <b>Total</b>              | 394 | 100  |
| Region       | North Punjab              | 112 | 28.4 |
|              | South Punjab              | 57  | 14.8 |
|              | Sindh                     | 90  | 23.3 |
|              | Khyber Pakhtunkhwa        | 41  | 10.6 |
|              | Gilgit-Baltistan and FATA | 32  | 8.3  |
|              | Baluchistan               | 37  | 9.6  |
|              | Azad Jammu and Kashmir    | 25  | 6.5  |
|              | <b>Total</b>              | 394 | 100  |

### 4.2. Common Method Variance

Furthermore, to test the common method bias (CMB), Harman's single factor test was applied by inputting the main constructs into the principal component factor analysis on SPSS (Podsakoff et al., 2003). Based on the results, the cumulative sum of variance explained was 66.997% while the variance for the first factor was 19.393%, lower than the threshold level of 50% of the total variance explained. According to Podsakoff et al. (2003), these results indicated that there was no common method bias problem in the data since the single factor variance was lower than 50%.

### 4.3. Descriptive and Correlation Matrix

Table 2 shows the representation of descriptive and correlational matrix, and the results of aggregate mean, standard deviation, correlations of all the variables, and their internal consistencies. The mean values of all the variables were between the range of 3.67 to 3.89, with the aggregate value of mean for WPS = 3.78, ER = 3.82, TI = 3.75, and JS = 3.80, indicating that all mean values of the items were consistent and low in variance. The standard deviation values of items were between the range of 0.88 and 1.20, with the aggregate value of standard deviation for WPS = 1.02, ER = 0.94, TI = 1.11, and JS = 1.06, demonstrating

**Table 2:** Descriptive Statistics and Correlation Mmatrix

| Descriptive |      |      | Latent Variable Correlations |         |         |       |
|-------------|------|------|------------------------------|---------|---------|-------|
|             | Mean | SD   | ER                           | JS      | TI      | WPS   |
| <b>ER</b>   | 3.82 | 0.94 | 1.000                        |         |         |       |
| <b>JS</b>   | 3.80 | 1.06 | 0.592*                       | 1.000   |         |       |
| <b>TI</b>   | 3.75 | 1.11 | -0.472*                      | -0.628* | 1.000   |       |
| <b>WPS</b>  | 3.78 | 1.02 | 0.680*                       | 0.578*  | -0.696* | 1.000 |

Notes: Significant level \* $p < 0.05$ .

that the items were within an acceptable range. Furthermore, for the construct correlation, the latent variable correlation was computed and reported in Table 2, indicating that WPS and JS positively correlated with ER. Meanwhile, WPS and JS negatively correlated with TI. Referring to Table 2, the correlation outcome among all the variables are within acceptable, indicating no correlation problem in the data.

#### 4.4. Measurement Model Analysis

Table 3 shows the representation of reliability and validity analysis. The first factor reported in Table 3 was

**Table 3:** Results of the Measurement Model Analysis (Reliability of Constructs)

| Latent variable and item   | VIF  | Factor loadings | Cronbach's alpha | CR   | AVE   |
|----------------------------|------|-----------------|------------------|------|-------|
| <b>Workplace safety</b>    |      |                 | 0.84             | 0.88 | 0.566 |
| WPS1                       | 1.23 | 0.520           |                  |      |       |
| WPS2                       | 3.08 | 0.835           |                  |      |       |
| WPS3                       | 3.19 | 0.852           |                  |      |       |
| WPS5                       | 1.48 | 0.662           |                  |      |       |
| WPS6                       | 1.72 | 0.751           |                  |      |       |
| WPS7                       | 2.34 | 0.836           |                  |      |       |
| <b>Employee retention</b>  |      |                 | 0.90             | 0.92 | 0.517 |
| ER1                        | 2.55 | 0.751           |                  |      |       |
| ER2                        | 2.30 | 0.739           |                  |      |       |
| ER3                        | 2.73 | 0.784           |                  |      |       |
| ER4                        | 3.09 | 0.836           |                  |      |       |
| ER5                        | 2.33 | 0.781           |                  |      |       |
| ER7                        | 1.81 | 0.642           |                  |      |       |
| ER8                        | 1.37 | 0.627           |                  |      |       |
| ER9                        | 1.60 | 0.680           |                  |      |       |
| ER10                       | 2.14 | 0.658           |                  |      |       |
| ER11                       | 2.24 | 0.664           |                  |      |       |
| <b>Turnover intentions</b> |      |                 | 0.84             | 0.88 | 0.555 |
| TI1                        | 3.08 | 0.852           |                  |      |       |
| TI2                        | 1.41 | 0.684           |                  |      |       |
| TI3                        | 1.29 | 0.641           |                  |      |       |
| TI4                        | 2.11 | 0.804           |                  |      |       |
| TI6                        | 3.24 | 0.553           |                  |      |       |
| <b>Job satisfaction</b>    |      |                 | 0.70             | 0.81 | 0.516 |
| JS1                        | 1.50 | 0.616           |                  |      |       |
| JS2                        | 1.58 | 0.695           |                  |      |       |
| JS4                        | 1.47 | 0.823           |                  |      |       |
| JS5                        | 1.34 | 0.725           |                  |      |       |

Note: WPS4, ER6, TI5,7, JS3 were deleted to improve the results.

VIF which was calculated to test the inter-item correlation. In the present study, all the values for VIF were below 3.3, indicating the absence of an inter-item correlation (Hair et al., 2013). For the reliability of the instrument, five-items (WPS-4, ER-6, TI-5, 7, and JS-3), with loading lower than 0.50 were dropped from the measurement model. Further, the Cronbach’s alpha ( $\alpha$ ), composite reliability (CR), and average variance extracted (AVE) values are above the threshold level at 0.70, 0.60, and 0.50 respectively; confirming the reliability and validity (Hair et al., 2013).

**4.5. Discriminant Validity and Model Fitness**

Discriminant validity means to what extent all the constructs are distinct from each other (Gold et al., 2001). The discriminant validity of the present study referring to Table 4 was measured through HTMT which is the most recent criteria based upon its relevancy and accuracy (Henseler, 2012). HTMT’s threshold level is 1. All the HTMT values of the present study were below 1, indicating the non-existence of the discriminant validity problem. Further, the fitness of the study model was tested through measurement model analysis on PLS. The study model was tested through NFI,

**Table 4:** Heterotrait-Monotrait Ratio (HTMT)

|     | ER    | JS    | TI    | WPS |
|-----|-------|-------|-------|-----|
| ER  |       |       |       |     |
| JS  | 0.699 |       |       |     |
| TI  | 0.743 | 0.662 |       |     |
| WPS | 0.863 | 0.717 | 0.796 |     |

**Table 5:** Structural Model

|    | Hypothesis | $\beta$ | T-stat  | Adj-R <sup>2</sup> | F <sup>2</sup> | P value  | Decision  |
|----|------------|---------|---------|--------------------|----------------|----------|-----------|
| H1 | WPS → ER   | 0.653   | 19.063  | 0.642              | 0.82           | 0.000*** | Supported |
| H2 | WPS → TI   | -0.873  | -34.564 | 0.309              | 2.98           | 0.000*** | Supported |
| H3 | WPS → JS   | 0.558   | 15.558  | 0.803              | 0.45           | 0.000*** | Supported |
| H4 | JS → ER    | 0.228   | 6.035   |                    | 0.53           | 0.000*** | Supported |
| H5 | JS → TI    | -0.141  | -3.490  |                    | 0.40           | 0.000*** | Supported |

Notes: Significant level \*\*\* $p < 0.001$ .

**Table 6:** Indirect Relationship

|    | Hypothesis    | $\beta$ | T statistics | P-value  | Decision      |
|----|---------------|---------|--------------|----------|---------------|
| H6 | WPS → JS → ER | 0.127   | 5.161        | 0.000*** | Supported     |
| H7 | WPS → JS → TI | -0.023  | -1.359       | 0.087    | Not supported |

Notes: Significant level \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .

chi-square, and SRMR values. All three values achieved a threshold level at 0.834, 1062.234, and 0.079 respectively.

**4.6. Structural Equation Modelling**

Table 5 demonstrates the results of the direct relationship. The results revealed that WPS-ER was significant ( $\beta = 0.653, t = 19.063, P = 0.000$ ), supporting H1. Meanwhile, WPS-TI was significant ( $\beta = -0.873, t = -34.564, P = 0.000$ ), supporting H2; and WPS-JS was significant ( $\beta = 0.558, t = 15.558, P = 0.000$ ), supporting H3. Furthermore, JS-ER was significant ( $\beta = 0.228, t = 6.035, P = 0.000$ ), supporting H4; and JS-TI was significant ( $\beta = -0.141, t = -3.49, P = 0.000$ ), supporting H5. Thus, this study revealed the importance of safety for employees as it confirmed the influence of safety on job satisfaction, employee retention, and turnover intentions.

The effect size ( $f^2$ ) which represents the strength of exogenous constructs and the extracted values are WPS → ER = 0.82; WPS → TI = 2.98; WPS → JS = 0.45; JS → ER = 0.53 and JS → TI = 0.40 showing strong effects. While  $R^2$  value of endogenous constructs was 0.642 for ER, 0.309 for TI, and 0.803 for JS, generating an acceptable  $R^2$  value for the present study. Consequently, significant direct relationships between all variables were confirmed. In the presence of a significant direct relationship, the present study tested the indirect relationships through mediation analysis to know how, or by what means, an independent variable affects a dependent variable.

**4.7. Mediation Relationship**

Table 6 demonstrates the results of the mediation hypothesis conducted through bootstrapping. The results indicated that JS mediated the relationship between WPS to

ER ( $\beta = 0.127, t = 5.037, P = 0.000$ ), supporting hypothesis 6, in accordance with the previous study by Salman et al. (2016). Based on the findings, people working in a safe environment are more relaxed and satisfied, and their chances to stay are stronger. However, JS failed to mediate the relationship between WPS and TI ( $\beta = -0.023, t = 1.359, P = 0.087$ ), in opposition to the previous findings by Smith (2018); hence, rejecting H7.

## 5. Discussion

To achieve the desired purpose, a conceptual framework was developed from the literature based on the social exchange theory. Based on the findings, this study contributes to the literature on workplace safety on several grounds. For instance, this study expands the literature related to workplace safety of doctors working in Pakistan by scrutinizing the effects of the doctors' perceptions about the safety risks in the workplace and the impacts on their decision to stay or leave. The results of this study showed a significant positive relationship between workplace safety and employee retention while it was negatively significant with employee turnover. These results agree with the previous findings by Salman et al. (2016) and Smith (2018). Therefore, the first and second hypotheses of the study were supported. The results also revealed that the doctors' perception about safety in their workplace was at the weakest. Consequently, while dealing with critical care patients, they feel fearful of getting injured by patients and their attendants (Singh, 2017). Thus, the feeling of being safe aids confidence and satisfaction, which can be a source of employee retention while its absence brings dissatisfaction, job stress, and high turnover intentions (Walton & Rogers, 2017).

This study also reported a direct relationship between workplace safety and job satisfaction. The result stated that workplace safety was significantly positive with job satisfaction. This finding is consistent with Logasakthi and Rajagopal (2013) supporting the third hypothesis of the study. This result indicates that through workplace safety, organizations can improve the well-being of their employees and boost their morale. As a result, job satisfaction will increase. Furthermore, this study found that job satisfaction was significantly positive with employee retention, which was consistent with a previous study by Salman et al. (2016), supporting the fourth and fifth hypotheses. In other words, job satisfaction is a true representation of an employee's perception and evaluation regarding their jobs. Therefore, creating a pleasant and cheerful work environment can result in an improvement of retention, thus lowering the turnover. Last, the findings of this study also supported the sixth hypothesis, showing that job satisfaction mediated the relationship between workplace safety and employee retention, as consistent with the findings by Salman et al. (2016). However, job satisfaction failed to mediate between

workplace safety and turnover intention, suggesting that a person who is dissatisfied with safety would not necessarily leave the organization.

This study stated in the beginning that job satisfaction was a significant mediator among workplace safety and employee retention; this is consistent with Salman et al. (2016). Based on the results, this study indicates that those hospitals providing a safe working environment have more satisfied doctors who are productive instead of constantly thinking about quitting the organization. This study provides strong evidence to connect workplace safety and employee retention through job satisfaction. Consequently, job satisfaction is an imperative factor to help an employee to make decisions to stay in an organization. Furthermore, in the present study, job satisfaction failed to mediate between workplace safety and turnover intention. Thus, a dissatisfied employee would not necessarily leave the organization. According to Chen (2005), sometimes employees are dissatisfied but they still are not in a position to leave the organization. For instance, in developing countries, monetary factors are more important than other factors. In such scenarios, people prefer to continue despite being dissatisfied because they think if they quit the job, they will not be able to find new jobs.

## 6. Conclusion and Limitations

This study produces numerous practical implications for management professionals, HR practitioners, and organizations. It provides guidelines to management professionals to focus on the strategic implementation of workplace safety to provide ways to improve the retention rate among employees. To further explain the importance, there is a common saying, "if there is a life, there is a world". People can compromise perks, but they will not compromise their dignity or threats to their lives. Therefore, HR practitioners are required to understand the changing dynamics of workplace safety and strategically design safety practices that are easily implementable to increase employee retention. Consequently, safety is a very important aspect, and it has the power to push employee's thoughts towards a more positive direction, reducing the turnover intention. A sense of safety also strengthens the sense of connections among employees in their organization since the employees feel their organization is taking care of them from any threat. In turn, this protects the organization from experiencing skill or talent loss. Hence, organizations need to create an environment where no one feels threatened to encourage employees to stay longer.

The present study's findings can also be utilized by healthcare leaders to identify innovative approaches that might help them to improve employee's perception of the workplace environment. Therefore, healthcare leaders can initiate safety processes by training employees and security



staff, strictly following rules and regulations, and taking strict actions when any incident happens. This will also help to prevent the culture of negativity.

While refining the understanding of workplace safety, job satisfaction, employee retention, and turnover intention, this study also faced several limitations. For instance, this study focused on the healthcare industry; therefore, it may have limited applicability to other industries. The values for model fit were calculated through PLS; however, in future studies for better validation of the study model GFI, CFI, TLI, and RMSEA through AMOS can be calculated (Henseler, 2012). Moreover, in the present study, doctors were the only unit of analysis. Future studies could be extended to other healthcare workers like nurses, paramedics, and supporting staff. In this study, age, gender, and location were used as the only demographic factors, which can be used as control variables in future studies. Future researchers can conduct a comparative study between public and private organizations. Job satisfaction mediated between workplace safety and employee retention while it failed to form a relationship between workplace safety and turnover intention, opening up avenues to introduce other mediators in this model. For instance, in future studies, organizational commitment or employee motivation can be introduced as a mediator in the present model since they also have the ability to influence employee intentions and behaviors.

## References

- Abdul Razak Shaikh, D. (2018). *Doctor under fear of humiliation*. Daily Times. Retrieved from <https://dailytimes.com.pk/315732/doctor-under-fear-of-humiliation/>
- Ackfeldt, A. L., & Coote, L.V. (2005). A study of organizational citizenship behaviors in a retail setting. *Journal of Business Research*, 58(2), 151–159. [https://doi.org/10.1016/S0148-2963\(03\)00110-3](https://doi.org/10.1016/S0148-2963(03)00110-3)
- Ahmed, A., & Ahsan, H. (2011). *Contribution of the services sector in the economy of Pakistan* (PIDE Working Papers 79). Pakistan Institute of Development Economics Islamabad. <https://pide.org.pk/pdf/Working%20Paper/WorkingPaper-79.pdf>
- Ahmed, F., Memon, M. K., & Memon, S. (2018). Violence against doctors: A serious concern for healthcare organizations to ponder about. *Annals of Medicine and Surgery*, 25(1), 3–5. <https://doi.org/10.1016/j.amsu.2017.11.003>
- Ali, A. A., & Sayed, M. N. (2020). Determinants of healthcare expenditures in GCC Countries: A panel data analysis. *The Journal of Asian Finance, Economics, and Business*, 7(8), 705–714. <https://doi.org/10.13106/jafeb.2020.vol7.no8.705>
- Ali, F. S., Zuberi, B. F., Rasheed, T., & Shaikh, M. A. (2019). Why doctors are not satisfied with their job-current status in tertiary care hospitals. *Pakistan Journal of Medical Sciences*, 35(1), 205–210. <https://doi.org/10.12669/pjms.35.1.72>
- Alipour, A., Dianat, I., Halvani, G. H., & Falah Zadeh, H. (2018). Individual and job factors affecting the exposure to occupational violence among health care workers in the hospitals in Yazd province in 2016. *Health and Safety at Work*, 8(2), 175–186. <http://jhs.w.tums.ac.ir/article-1-5857-en.html>
- Aman-Ullah, A., Aziz, A., & Ibrahim, H. (2020a). A systematic review of employee retention: What's next in Pakistan? *Journal of Contemporary Issues and Thought*, 10(2), 36–45. <https://doi.org/10.37134/jcit.vol10.sp.4.2020>
- Aman-Ullah, A., Aziz, A., & Ibrahim, H. (2020b). A review of motivational factors and employee retention: A future direction for Pakistan. *International Journal of Business and Technopreneurship*, 10(3), 331–342. <http://103.86.130.60/xmlui/handle/123456789/69225>
- Ayim-Gyekye, S. (2005). Workers' perceptions of workplace safety and job satisfaction. *International Journal of Occupational Safety and Ergonomics*, 11(1), 291–302. <https://doi.org/10.1080/10803548.2005.11076650>
- Beus, J. M., Mccord, M. A., & Zohar, D. (2016). Workplace safety: A review and research synthesis. *Organizational Psychology Review*, 6(4), 352–381. <https://doi.org/10.1177/2041386615626243>
- Binmadi, N. O., & Alblowi, J. A. (2019). Prevalence and policy of occupational violence against oral healthcare workers: Systematic review and meta-analysis. *BMC Oral Health*, 19(1), 279–287. <https://doi.org/10.1186/s12903-019-0974-3>
- Blau, P. (1964). *Power and exchange in social life*. New York: Wiley.
- Boakye-Dankwa, E., Teeple, E., Gore, R., Punnett, L., & Team, P. R. (2017). Associations among health care workplace safety, resident satisfaction, and quality of care in long-term care facilities. *Journal of Occupational and Environmental Medicine*, 59(11), 1127–1155. <https://doi.org/10.1097/JOM.0000000000001163>
- Chen, L. T. (2005). *Exploring the relationship among transformational and transactional leadership behavior, job satisfaction, organizational commitment, and turnover in Shanghai* [Master Thesis, Nova Southeastern University, China]. <https://search.proquest.com/openview/220e672524f665166278e04be751fdc5/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Cho, S., Woods, R. H., Jang, S. S., & Erdem, M. (2006). Measuring the impact of human resource management practices on hospitality firms' performances. *International Journal of Hospitality Management*, 25(2), 262–277. <https://doi.org/10.1016/j.ijhm.2005.04.001>
- Choi, S., Jang, I., Park, S., & Lee, H. (2014). Effects of organizational culture, self-leadership, and empowerment on job satisfaction and turnover intention in general hospital nurses. *Journal of Korean Academy of Nursing Administration*, 20(2), 206–214. <https://doi.org/10.1111/jkana.2014.20.2.206>
- Clarke, S. (2010). An integrative model of safety climate: Linking psychological climate and work attitudes to individual safety outcomes using meta-analysis. *Journal of Occupational and Organizational Psychology*, 83(3), 553–578. <https://doi.org/10.1348/096317909X452122>

- Congressional Research Service. (2020). *Global economic effects of COVID-19*. <https://fas.org/sgp/crs/row/R46270.pdf>.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, 31(6), 874–900. <https://doi.org/10.1177/0149206305279602>
- De Sousa, S., M., Ledimo, O., & Martins, N. (2018). Predicting staff retention from employee motivation and job satisfaction. *Journal of Psychology in Africa*, 28(2), 136–140. <https://doi.org/10.1080/14330237.2018.1454578>
- Dejoy, D. M., Della, L. J., Vandenberg, R. J., & Wilson, M. G. (2010). Making work safer: Testing a model of social exchange and safety management. *Journal of Safety Research*, 41(2), 163–171. <https://doi.org/10.1016/j.jsr.2010.02.001>
- Emberland, J., & Rundmo, T. (2010). Implications of job insecurity perceptions and job insecurity responses for psychological well-being, turnover intentions and reported risk behavior. *Safety Science*, 48(4), 452–459. <https://doi.org/10.1016/j.ssci.2009.12.002>
- Esmailpour, M., Salsali, M., & Ahmadi, F. (2011). Workplace violence against Iranian nurses working in emergency departments. *International Nursing Review*, 58(1), 130–137. <https://doi.org/10.1111/j.1466-7657.2010.00834>
- Fallatah, R. H. M., & Syed, J. (2018). *A critical review of Maslow's hierarchy of needs. Employee motivation in Saudi Arabia*. New York, NY: Springer.
- Frey, R. V., Bayon, T., & Totzek, D. (2013). How customer satisfaction affects employee satisfaction and retention in a professional services context. *Journal of Service Research*, 16(4), 503–517. <https://doi.org/10.1177/1094670513490236>
- Frye, W. D., Kang, S., Huh, C., & Lee, M. J. M. (2019). What factors influence Generation Y's employee retention in the hospitality industry? An internal marketing approach. *International Journal of Hospitality Management*, 85(1), 102–352. <https://doi.org/10.1016/j.ijhm.2019.102352>
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems*, 18(1), 185–214. <https://doi.org/10.1080/07421222.2001.11045669>
- Griffeth, R. W., & Hom, P. W. (2001). *Retaining valued employees: Advanced topics in organizational behavior*. Thousand Oaks, CA: Sage Publications.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results, and higher acceptance. *Long Range Planning*, 46(1), 1–12. <https://doi.org/10.1016/j.lrp.2013.01.001>
- Henseler, J. (2012). Why generalized structured component analysis is not universally preferable to structural equation modeling. *Journal of the Academy of Marketing Science*, 40(3), 402–413. <https://doi.org/10.1007/s11747-011-0298-6>
- Hinkin, T.R., & Tracey, J. B. (2000). The cost of turnover: Putting a price on the learning curve. *Cornell Hotel and Restaurant Administration Quarterly*, 41(3), 14–21. <https://doi.org/10.1177/001088040004100313>
- Hom, P. W., Lee, T. W., Shaw, J. D., & Hausknecht, J. P. (2017). One hundred years of employee turnover theory and research. *Journal of Applied Psychology*, 102, 530–367. <https://doi.org/10.1037/apl0000103>
- Homburg, V., Van Der Heijden, B., & Valkenburg, L. (2013). Why do nurses change jobs? An empirical study on determinants of specific nurses' post-exit destinations. *Journal of nursing management*, 21(6), 817–826. <https://doi.org/10.1111/jonm.12142>
- Huang, Y. H., Lee, J., Mcfadden, A. C., Murphy, L. A., Robertson, M. M., Cheung, J. H., & Zohar, D. (2016). Beyond safety outcomes: An investigation of the impact of safety climate on job satisfaction, employee engagement and turnover using social exchange theory as the theoretical framework. *Applied Ergonomics*, 55(1), 248–257. <https://doi.org/10.1016/j.apergo.2015.10.007>
- Iqbal, S., Guohao, L., & Akhtar, S. (2017). Effects of job organizational culture, benefits, salary on job satisfaction ultimately affecting employee retention. *Review of Public Administration and Management*, 5(3), 229–236. <https://doi.org/10.4172/2315-7844.1000229>
- Kyndt, E., Dochy, F., Michielsen, M., & Moeyaert, B. (2009). Employee retention: Organisational and personal perspectives. *Vocations and Learning*, 2(3), 195–215. <https://doi.org/10.1007/s12186-009-9024-7>
- Lamond, D., Zheng, C., & Tian-Foreman, W. A. (2009). Job satisfaction and turnover in the Chinese retail industry. *Chinese Management Studies*, 3(4), 356–378. <https://doi.org/10.1108/17506140911007503>
- Lee, T.W., & Mitchell, T. R. (1994). *Organizational attachment: Attitudes and actions*. New Jersey: Lawrence Erlbaum Associates, Inc.
- Locke, E. A. (1976). *The nature and causes of job satisfaction*. Chicago, IL: Rand McNally.
- Logasakthi, K., & Rajagopal, K. (2013). A study on employee health, safety, and welfare measures of the chemical industry in the view of Salem region. *Management*, 1(1), 1–10. <http://paper.researchbib.com/view/paper/6739>
- March, J. G., & Simon, H. A. (1959). *Organizations*. New York, NY: Wiley.
- Mihiravi, D., & Perera, G. (2016). Impact of Occupational Safety and Health Practices on Job Satisfaction A Study in Selected Large Scale Apparel Firms in Colombo District. 3<sup>rd</sup> International HRM Conference, 8<sup>th</sup> October, Colombo. <http://dr.lib.sjp.ac.lk/bitstream/handle/123456789/5831>
- Mir, A. M., Shaikh, M. S., Rashida, G., & Mankani, N. (2015). To serve or to leave: a question faced by public sector healthcare providers in Pakistan. *Health Research Policy and Systems*, 13(1), 85–91. <https://doi.org/10.1186/s12961-015-0045-4>
- Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablynski, C. J., & Erez, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal*, 44(6), 1102–1121. <https://doi.org/10.2307/3069391>

- Moncarz, E., Zhao, J., & Kay, C. (2009). An exploratory study of US lodging properties' organizational practices on employee turnover and retention. *International Journal of Contemporary Hospitality Management*, 21(4), 437–458. <https://doi.org/10.1108/09596110910955695>
- Oladeji, B. D., & Gureje, O. (2016). Brain drain: a challenge to global mental health. *BJ Psych International*, 13(3), 61–63. <https://doi.org/10.1192/s2056474000001240>
- Phillips, J. J., & Connell, A. O. (2003). *Managing employee retention: A strategic accountability approach*. London, UK: Routledge.
- Podsakoff, P.M., Mackenzie, S.B., Lee, J. Y., & Podsakoff, N.P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Price, J. L. (1977). *The study of turnover*. Ames, Iowa: The Iowa State University Press.
- Salman, S., Mahmood, A., Aftab, F., & Mahmood, A. (2016). Impact of safety health environment on employee retention in the pharmaceutical industry: Mediating role of job satisfaction and motivation. *IBT Journal of Business Studies*, 12(1), 185–197. <https://doi.org/10.46745/ilma.ibtjbs.2016.122.13>
- Sanyal, S., Hisam, M. W., & Baawain, A. M. S. (2020). Entrepreneurial orientation, network competence and human capital: The internationalization of SMEs in Oman. *The Journal of Asian Finance, Economics, and Business*, 7(8), 473–483. <http://doi.org/10.13106/jafeb.2020.vol7.no8.473>
- Simons, T., & Hinkin, T. (2001). The effect of employee turnover on hotel profits: A test across multiple hotels. *Cornell Hotel and Restaurant Administration Quarterly*, 42(4), 65–69. [https://doi.org/10.1016/S0010-8804\(01\)80046-X](https://doi.org/10.1016/S0010-8804(01)80046-X)
- Singh, M. (2017). Intolerance and violence against doctors. *The Indian Journal of Pediatrics*, 84(10), 768–773. <https://doi.org/10.1007/s12098-017-2435-9>
- Smith, T. D. (2018). An assessment of safety climate, job satisfaction and turnover intention relationships using a national sample of workers from the USA. *International Journal of Occupational Safety and Ergonomics*, 24(1), 27–34. <https://doi.org/10.1080/10803548.2016.1268446>
- Spector, P. E., Coulter, M. L., Stockwell, H. G., & Matz, M. W. (2007). Perceived violence climate: A new construct and its relationship to workplace physical violence and verbal aggression, and their potential consequences. *Work & Stress*, 21(2), 117–130. <https://doi.org/10.1080/02678370701410007>
- Steers, R. M., & Mowday, R. T. (1981). Employee turnover and post-decision accommodation process. In: L. L. Cummings & B. M. Staw. *Research in organizational behavior* (pp. 235–281). Greenwich, CT.: JAI Press
- Walton, A. L., & Rogers, B. (2017). Workplace hazards faced by nursing assistants in the United States: A focused literature review. *International Journal of Environmental Research and Public Health*, 14, 544–569. <https://doi.org/10.3390/ijerph14050544>.
- Wang, H., Jin, Y., Wang, D., Zhao, S., Sang, X., & Yuan, B. (2020). Job satisfaction, burnout, and turnover intention among primary care providers in rural China: results from structural equation modeling. *BMC Family Practice*, 21(5), 12–22. <https://doi.org/10.1186/s12875-020-1083-8>
- Winterton, J. (2004). A conceptual model of labor turnover and retention. *Human Resource Development International*, 7(3), 371–390. <https://doi.org/10.1080/1367886042000201967>
- Yusuf, R.M., Eliyana, A., & Sari, O. N. (2012). The influence of occupational safety and health on performance with job satisfaction as intervening variables: Study on the production employees in PT. Mahakarya Rotanindo, Gresik. *American Journal of Economics*, 6, 136–140. <https://doi.org/10.5923/j.economics.20120001.30>