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# Learned Resourcefulness and Job Performance: The Mediating Role of Job Satisfaction Among Frontline Healthcare Workers

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**Abstract**

*The present research was conducted to see the relationship between learned resourcefulness, job satisfaction and job performance among frontline healthcare workers. With respect to research factors, group differences across demographics were also examined. A purposive sample (N=400) of frontline healthcare workers, including doctors (n= 254), Nurses (n= 90) and Paramedical staff (n= 56) having age range of 22 to 47 years. The sample was selected from private and public hospitals located in Peshawar, Islamabad/ Rawalpindi, Multan and Charsadda. Measures of Job Performance Scale (Wright et al., 1995), Job Satisfaction Scale (Warr et al., 1979), and Self-control Schedule (Rosenbaum, 1990) were used to measure job performance, job satisfaction, and learned resourcefulness, respectively. Findings showed that job satisfaction is positively correlated with job performance and learned resourcefulness. Findings further indicated that redressive self-control and extrinsic job satisfaction positively predicted job performance. The findings further revealed that female frontline healthcare workers exhibited higher extrinsic job satisfaction than male frontline healthcare workers. Moreover, paramedical staff exhibited higher job performance and job satisfaction than nurses and doctors. Inferences drawn from the present study would reflect both theoretical and practical implications for hospital administrations in enhancing job performance and the development of prevention programs to increase job satisfaction. Similarly, the modules of learned resourcefulness can be employed by mental healthcare professionals.*

**Keywords:** Job performance; learned resourcefulness; job satisfaction; frontline healthcare workers

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## 1. INTRODUCTION

Frontline healthcare workers form a vital pillar of the healthcare system, enabling efficient and high-quality delivery of services. For millions of patients, they are often the first and sometimes the only point of contact with formal healthcare. These professionals offer a broad range of lifesaving interventions to prevent disease, disability, and death. While many are midwives and general health providers, frontline workers also include local chemists, nurses, and doctors serving underprivileged communities (WHO,

2019). The World Health Organization has expressed significant concern to top healthcare administrators and providers regarding the poor quality of healthcare services, a matter that has received substantial media attention (WHO, 2020). Rising life expectancy and the increasing number of individuals surviving serious conditions have created an urgent demand for a well-staffed frontline workforce (Yu et al., 2020). As thousands of new health professionals enter the field, competition has increased. Consequently, the performance of healthcare worker including doctors, nurses, paramedics, and support staff, has become a focal point for healthcare organizations. Health workers have an important role on the healthcare team, dedicated to delivering high-quality care to patients, clients, or communities (Alafoo et al., 2024). The job performance of health workers is a multidimensional concept. It refers to their ability to give high-quality services in a professional and standard manner (Krijgsheld et al., 2022). Health workers' performance is commonly evaluated through key performance indicators such as patient satisfaction and the overall quality of healthcare services delivered (Sreedharan et al., 2024). In this context, service delivery and overall performance are continually scrutinized (Busari et al., 2017).

Job performance refers to the degree to which an employee can meet the required standards of proficiency in performing organizational activities (López-Cabarcos et al., 2021). Job performance, as a study variable, has been the focus of extensive research for over a decade. It is widely recognized as a crucial factor in achieving organizational effectiveness (Kappagoda et al., 2014). In contrast to many other professions, the work of healthcare professionals holds particular importance, as it directly influences the health and well-being of society, the individuals they serve, and their own personal health (Victoroff et al., 2013). Due to the high demands of their jobs, healthcare workers experience occupational stress for various reasons. These include work-related stress, prolonged hours, emotional demands, resource availability, policies and procedures, interpersonal conflicts, job uncertainty, and financial or family pressure (Okuhara et al., 2021). These stressors can negatively impact healthcare professionals' health, job performance, and clinical outcomes. They also affect job satisfaction, workforce stability, employee engagement, and overall workplace well-being (Van Bogaert et al., 2013).

The majority of healthcare professionals in developing countries like Pakistan are dissatisfied with their pay, benefits, and the standard of living they or their families can enjoy there. This demotivation, in turn, leads to exploring opportunities in developed countries with a stronger pull force (Tasneem et al., 2018). Job satisfaction plays a significant role in enabling

employees to perform effectively in such demanding environments (Inayat & Khan, 2021). It encompasses an employee's emotional response to their job, both positive and negative, and reflects the overall level of happiness associated with their work experience (Singh et al., 2013). Empirical studies (Park & Kim 2009; Gerhart & Fang, 2015) underscore that employee satisfaction is positively linked to improved morale, greater efficiency, and enhanced job performance. Satisfied employees are also less likely to take unscheduled absences or consider leaving their positions.

Given these findings, the job satisfaction of frontline healthcare workers deserves serious attention, especially as it has been shown to significantly influence their performance and the quality of care they deliver.

Recent advances in literature on positive psychology have introduced the concept of learned resourcefulness, which relates to how individuals manage stressful life circumstances and maintain performance at work. According to Rosenbaum (1980), learned resourcefulness skills are acquired informally, beginning in early childhood. As each person's learning experiences differ, the capacity for learned resourcefulness can vary accordingly (Keles, 2015). In the present study, learned resourcefulness is examined as a predictor of job performance, alongside job satisfaction (Adil et al., 2019; Chung et al., 2017; Huang et al., 2005; Papageorgiou et al., 2017). Thus, job satisfaction and learned resourcefulness are treated as predictor variables, while job performance serves as the outcome variable.

## 2. LITERATURE REVIEW

The present study is grounded in well-established theoretical frameworks, such as the two-factor theory, the job characteristics model, Campbell's model, and Rosenbaum's Learned Resourcefulness Theory. These models help in explaining workplace outcomes among frontline healthcare workers in Pakistan. Recent literature (Umrani et al., 2019; Inayat & Khan, 2021; Rana et al., 2022) has highlighted the direct and indirect associations among learned resourcefulness, job performance, and job satisfaction. Resourcefulness is a concept that has been found to reduce depressive symptoms, and it is associated with process regulators that may be conceptually similar to compassion fatigue (Yolpant, 2019). The study by Inayat & Khan (2021) revealed a favorable association between job satisfaction and job performance among private employees in Peshawar. Additionally, the findings indicate that the performance of satisfied employees exceeds that of dissatisfied ones.

Nurses learned resourcefulness levels influence their intention to leave the job. Previous study found that nurses who exhibit high levels of learned resourcefulness report greater job satisfaction, less burnout, and less intention

to leave the job (Cinar et al., 2016; Wang et al., 2015). Chen et al. (2022) have discussed improved job performance results from emotionally supportive and meaningful workplace experiences. Furthermore, it establishes a substantial positive relationship between the learned resourcefulness and job performance of health provider (Harris et al., 2013). Research indicates that when individuals actively monitor and adjust their behavior to stay on track and receive meaningful external rewards, such as recognition or bonuses, they tend to stay more focused on their tasks and take greater responsibility for their work (Chen et al., 2022). A study by Guzzo et al. (2022) found that simply being older doesn't automatically make someone perform better at work. However, people who've worked longer and gained more experience-something that often comes with age tend to help their teams do better. Their knowledge, reliability, and ability to guide others can improve a group's overall performance. According to Gintner et al. (1989), resourceful employees had higher levels of job satisfaction, higher levels of job performance, and lower levels of intention to resign.

Previous literature (Abbas et al., 2020; Berhanu, 2023; Ning et al., 2023) has studied the mediating role of job satisfaction for different predictors such as staff development and performance, work-life balance and organizational commitment, and organizational culture and employee commitment. However, no study has investigated the mediating effect between learned resourcefulness and job performance. Recent research (Rubacca & Khan, 2020) has investigated the mediating role of job satisfaction. The findings demonstrated that job satisfaction partially mediated the proposed relationship, i.e., between job resourcefulness and contextual performance. Another study revealed that job satisfaction mediated the effect of quality of work life on job performance (Diana et al., 2020). Similar results were reported in research by Ashraf et al. (2013), which found a mediating role for job satisfaction between the work environment and organizational performance among healthcare workers. Therefore, this study aims to address a significant gap by examining whether job satisfaction mediates the relationship between learned resourcefulness and job performance.

This study addresses a critical gap in the existing literature by proposing and testing a conceptual framework that explores the psychosocial determinants of job performance among frontline healthcare workers in Pakistan. Specifically, this research examines the predictive roles of job satisfaction and learned resourcefulness, with a particular focus on the mediating role of job satisfaction between learned resourcefulness and job performance. Although prior studies have explored various predictors of job performance (Ashraf et al., 2015; Campbell, 1990; Borman & Motowidlo,

1997; Shafiq, 2014; Sarwar et al., 2017) and job satisfaction (Inayat & Khan, 2021; Platis et al., 2015), most have been conducted in Western contexts or have examined these constructs independently. There remains a lack of integrated research that investigates how learned resourcefulness- a cognitive-behavioral skill enabling individuals to self-regulate and cope with stress affects job performance and how job satisfaction may mediate this relationship, particularly in low- and middle-income countries such as Pakistan.

The selection of frontline healthcare workers as our research participants is intentional, given the unique demands and pressures associated with their roles. Their job performance is directly tied to patient outcomes and public health delivery, making their psychological underpinnings especially relevant (Victoroff & Boyatzis, 2013). By focusing on this group, the study aims to provide actionable insights for improving workforce well-being and productivity in healthcare settings.

Moreover, this study contributes to a growing body of literature by offering empirical evidence from Pakistan, a context underrepresented in global research on workplace performance and satisfaction. By contextualizing the psychological mechanisms within this setting, the study adds valuable insights to cross-cultural understandings of job performance and mental resilience in high-stress professions.

Based on the previous researches and research gaps, the following objectives have been proposed:

1. To observe the association between learned resourcefulness, job satisfaction and job performance.
2. To determine the predictive role of demographics on study variables.
3. To evaluate the mediating role of job satisfaction between learned resourcefulness and job performance.

The study proposes the following research hypotheses:

1. Job performance is positively related to job satisfaction and learned resourcefulness among frontline healthcare workers.
2. Learned resourcefulness is positively related to job performance and job satisfaction among frontline healthcare workers.
3. Job satisfaction is positively related to job performance and learned resourcefulness among frontline healthcare workers.
4. Redressive self-control and extrinsic job satisfaction positively predict job performance among frontline healthcare workers.
5. Age is positively related to job performance, learned resourcefulness, and job satisfaction among frontline healthcare workers.

## 3. MATERIALS AND METHODS

### 3.1. Participants

The sample was collected through purposive convenient sampling. The participants of the main study comprised doctors (*n* =254), Nurses (*n* = 90) and Paramedical staff (*n*=56). 54. 5 % from Government and Private Hospitals of Peshawar (*n* =218), 13% Rawalpindi (*n* = 52), 15.7% Islamabad (n=63), 4.7% Multan (n=19) and 12% Charsadda (*n* = 48). 56 % of the sample were Males (*n* =224), whereas 44% were females (*n*=176). The age range of the frontline healthcare workers was 22-47 (*M* = 33.1; *SD* = 8.06). Frontline healthcare workers with different demographics, such as age, gender, marital status, number of children, occupation, type of hospital, area of specialty, employment status, job experience, monthly income, family income, work position, work setting, work hours, frequency of dealing with critical patients, and work shifts, were selected.

### 3.2. Inclusion Criteria

The sample was selected from hospitals located in the twin cities of Islamabad and Rawalpindi, as well as from Multan, Peshawar, and Charsadda. Participants included both male and female frontline healthcare workers who were directly involved in patient care. Eligibility criteria required at least six months of experience in their current role and a work schedule comprising a minimum of eight hours per week in a hospital setting.

### 3.3. Exclusion Criteria

Frontline healthcare workers with less than six months of experience in their current role, as well as those currently on any form of leave, working remotely, or primarily engaged in community-based healthcare, are excluded. Additionally, healthcare workers not directly involved in hospital-based patient care, including those in hospital administration, management, or specialized fields with no direct patient contact, have also been excluded.

### 3.4. Instruments

Wright et al. (1995) developed a job performance scale that was used to assess participants' job performance. The scale has eight items. It is a 5-point Likert scale with scoring options: 1= *Strongly Disagree*, 2= *Disagree*, 3= *Neutral*, 4= *Agree*, 5= *Strongly Agree*. There are no reverse-scored items. The scale has the employee rating (self-rating) and the supervisor or immediate boss rating scale. The scale has a minimum score of 8 and a maximum score of 40. Shafique (2008) stated the alpha reliability of the job performance (self-rating and supervisor rating) scales as .78. The author

proposed that alpha reliabilities vary depending on the sample under study. The higher score indicates better job performance.

Rosenbaum's Self-control Schedule was used to assess learned resourcefulness (1980). It is a self-report measure that evaluates a person's capacity to cope with stress and stress response using cognitive strategies. The scale assesses people's inclination to utilize self-control skills, which include positive self-talk in the face of bad experiences, problem-solving abilities, the ability to delay gratification, and self-efficacy beliefs in one's capability to regulate internal states in stressful conditions (Rosenbaum, 1980a). The self-control Schedule is a 36-item scale scored on a 6-point Likert scale ranging from 6=*very characteristic of me, extremely descriptive* to 1=*very uncharacteristic of me, extremely non-descriptive*. Originally, the score for each item could range from +3 to -3, with no neutral response at 0. However, this scaling method makes interpretation difficult when predictive model testing is conducted. Therefore, the scaling method has been modified in numerous studies (i.e., Zauszniewski, 1994, 1995; Zauszniewski & Wykle, 1994). The items are divided into three subscales: redressive self-control (12 items: 1, 2, 3, 5, 13, 15, 23, 25, 26, 30, 31, 36), reformative self-control (15 items: 7, 9, 10, 11, 12, 17, 18, 20, 22, 27, 28, 29, 32, 33, 34) and perceived self-efficacy (9 items: 4, 6, 8, 14, 16, 19, 21, 24, 35). Items 4,6,8,9,14,16,18,19,21,29 and 35 are reversely scored. The score varied from 36 to 216, with higher values representing greater self-control abilities. Self-control Schedule has a Cronbach's Alpha reliability of .82 (Rosenbaum, 1980).

Job satisfaction was measured by the job satisfaction scale (Warr et al., 1979). The scale has 15-items with two subscales: the Extrinsic subscale has 8 items (1, 3, 5, 7, 9, 11, 13, 15) while the intrinsic subscale has 7-items (2, 4, 6, 8, 10, 12, 14). The job satisfaction scale is scored on a 7-point Likert scale with scoring options ranging from 1=*extremely dissatisfied* to 7= *extremely satisfied*. There are no reverse-scored items. The scale ranged from 15 to 105, with high ratings demonstrating greater job satisfaction. The two subscales revealed good reliability (intrinsic job satisfaction = .79–.85, and extrinsic job satisfaction = .74 –.78 in Warr et al. (1979).

### 3.5. Ethical Considerations

Permission for the use of measurement tools in the study was obtained via email. The research booklet comprised a demographic sheet, a job performance scale, a self-control schedule, and a job satisfaction scale. Prior to the initiation of the study, formal permission was obtained from hospital management and relevant authorities across various cities in Pakistan. Frontline Healthcare workers were recruited through purposive sampling.

The study's objectives were clearly communicated to all potential participants. Confidentiality of the information provided was assured, with a guarantee that responses would remain anonymous and would not be disclosed or used against participants. Written informed consent was obtained prior to the administration of the questionnaire. Participants were informed of their right to withdraw from the study at any time, for any reason, including discomfort or a change of mind, though they were encouraged to participate willingly and with full interest. Each participant received a copy of the booklet, including the demographic sheet and all relevant scales. They were provided with clear instructions and guidance to address any queries. The questionnaires were quantitatively assessed, and scores were recorded accordingly. Participants were sincerely appreciated for their time and valuable responses at the conclusion of their involvement.

### 3.6. Data Analysis

The data analysis was performed using IBM SPSS Statistics 23.0. In the initial phase, we calculated basic descriptive statistics and Pearson correlation for the association of variables. Afterwards, we employed Hayes's PROCESS macro in SPSS (Hayes, 2017) for mediation (model 4) analyses to identify which variables mediate the relationship between learned resourcefulness and job performance. The PROCESS macro is a frequently used method to test mediating effects in psychology and other fields of social sciences (Alfons et al., 2022). A path model was formulated based on mediation analyses to clarify the level of job satisfaction. We used a significance level of $\alpha = 0.05$.

## 4. RESULTS

This section presents the results of correlation and mediation analysis.

### 4.1. Correlations

Table 1 demonstrates that age and income have a significant positive correlation with job performance (self-rating and supervisor rating). Working hours are significantly negatively correlated with job performance, learned resourcefulness and job satisfaction. Job satisfaction is significantly positively correlated with job performance. Learned resourcefulness is significantly positively correlated with job performance.

Table 1. Correlation Between Demographic Variables, Job Performance, Learned Resourcefulness, And Job Satisfaction (N=400)

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | - | | | | | | | | | | | | | | |
| No of Children | .72** | - | | | | | | | | | | | | | |
| Work Hours | -.07 | -.13** | - | | | | | | | | | | | | |
| Job Exp | .66** | .51** | -.14** | - | | | | | | | | | | | |
| Monthly Income | .46** | .14** | .22** | .14** | - | | | | | | | | | | |
| Family Income | -.01 | -.001 | -.05 | -.02 | .06 | - | | | | | | | | | |
| JPSLR | .13* | .13* | -.13** | .13* | -.07 | .05 | - | | | | | | | | |
| JPS | .12* | .02 | .08 | .07 | .08 | -.03 | .25** | - | | | | | | | |
| SCS | .08 | .09 | -.09 | .07 | -.03 | -.06 | .23** | .13** | - | | | | | | |
| RDSC | -.01 | -.009 | -.15** | .02 | -.09 | -.03 | .19** | .05 | .72** | - | | | | | |
| RFSC | .14** | .13* | -.08 | .13* | .02 | -.09 | .25** | .11* | .86** | .53** | - | | | | |
| PSE | -.003 | .05 | .04 | -.05 | -.001 | .02 | -.03 | .09 | .34** | -.21** | .05 | - | | | |
| JSS | .11* | .15* | -.23** | .14** | -.09 | .06 | .37** | .16** | .24** | .14** | .23** | .11* | - | | |
| EJS | .10* | .15** | -.26** | .14** | -.11* | .05 | .37** | .16** | .20** | .14** | .20** | .06 | .95** | - | |
| IJS | .11* | .14** | -.17** | .12* | -.06 | .06 | .34** | .15** | .26** | .12* | .24** | .14* | .94** | .80** | - |

*Note.* Job performance self-rating, JPS= Job Performance Supervisor-rating, SCS= Self-control Schedule, RDSC=Redressive Self- control, RFSC=Reformative Self-control, PSE=Perceived Self-efficacy Scale, JSS= Job Satisfaction; EJS=Extrinsic Job Satisfaction, IJS=Intrinsic Job Satisfaction. ***p<.01.*p<.05*

### 4.2. Mediation Analysis

The mediation analysis was computed to identify the mechanism by which a relation exists between an independent and a dependent variable (Hayes, 2013). The present study assesses the mediating effect of job satisfaction on the relationship between learned resourcefulness and job performance among frontline healthcare workers. The mediation analysis was performed by using Process Macro developed by Hayes & Scharkow (2013).

Table 2 illustrates that learned resourcefulness predicts job performance and the relationship is partially mediated by job satisfaction. The coefficient for the direct effect (B = .08, p < .05) is smaller than the total effect (B = .11, p < .05), indicating that job satisfaction explains the relationship between learned resourcefulness and job performance. A direct effect coefficient that reduces to zero indicates perfect mediation. In this case, for path c' = .08 (see Figure 1), the effect is reduced significantly, confirming it as a partial mediation because the P value is significant. This suggests that mediation is occurring, but it is only partial in nature.

Table 2: Role of Job Satisfaction as a Mediator Between Learned Resourcefulness and Job Performance Among Frontline Healthcare Workers (N= 400)

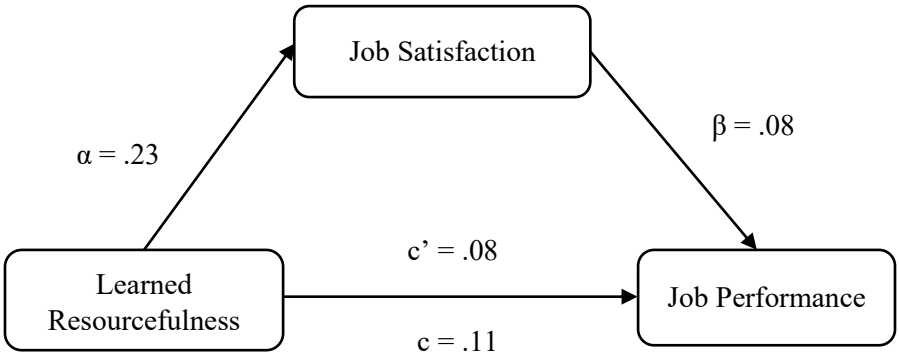
| Model | $R^2$ | *F* | *B* | *95% CI* | | P |
|---|---|---|---|---|---|---|
| | | | | LL | UL | |
| Models without Mediator | | | | | | |
| Total effect: LR → JP (c) | | | .11 | .05 | .17 | .00 |
| | .04 | 14.31 | | | | |
| Model with Mediator | | | | | | |
| LR → JSS (Med) (a) | | | .23 | .14 | .32 | .00 |
| | .06 | 23.67 | | | | |
| JSS → JP (b) | | | .08 | .06 | .10 | .00 |
| Direct Effect: LR → JP (c') | | | .08 | .02 | .13 | .00 |
| | .15 | 34.84 | | | | |
| Indirect Effect JSS (a×b) c-c' | | | .03 | .01 | .06 | .00 |

*Note.* LR= Learned Resourcefulness (Predictor); JSS= Job Satisfaction (Mediator); JP= Job performance (Outcome); Path a= effect of IV on mediator; Path b= effect of mediator on DV; Path c = total effect without mediator; Path c'= direct effect including mediator; c-c'= Indirect effect; CI= Confidence Interval; ****p<.001**p<.01 *p<.05*

Figure 1 shows that the value of c' is smaller .08 than the value of c= .11, which is a sign that mediation is taking place. It is shown in the figure that job

satisfaction is playing mediating role between learned resourcefulness and job performance among frontline healthcare workers.

Figure 1: Mediating Effect of Job Satisfaction Between Learned Resourcefulness and Job Performance




### 4.3. Gender and Designation Differences

Independent-samples t-tests and ANOVA were conducted to examine the effects of variables such as gender and designation on the job performance of frontline healthcare workers. Table 3 presents differences in study variables by gender among frontline healthcare workers. Results indicate that females score higher on extrinsic job satisfaction (*M*= 37.73, *SD*= 8.47) than males (*M*= 36.00, *SD*= 9.32). The value of Cohen's d is .20 (<.05), which demonstrates a small effect size. Findings exhibit nonsignificant mean differences for job performance, job satisfaction, intrinsic job satisfaction, and learned resourcefulness.

Table 4 illustrates a one-way ANOVA to compare the mean differences across designations on study variables. The findings show significant differences for job performance self-rating, job satisfaction, and extrinsic and intrinsic job satisfaction. The comparison reveals that paramedical staff score higher on job performance self-ratings, job satisfaction, and extrinsic and intrinsic job satisfaction than doctors and nurses.

Table 3: Gender Differences on Study Variables (N=400)

| Variables | Male ($n$=224) | | Female ($n$ = 176) | | | | 95% CI | | |
|---|---|---|---|---|---|---|---|---|---|
| | *M* | *SD* | *M* | *SD* | *t(398)* | *P* | *LL* | *UL* | Cohen's *d* |
| JPSR | 29.72 | 4.02 | 29.69 | 4.10 | .08 | .93 | -.77 | .84 | - |
| JPS | 30.11 | 3.20 | 30.11 | 3.70 | -.01 | .99 | -.682 | .678 | - |
| SCS | 146.51 | 16.8 | 145.67 | 17.2 | .48 | .63 | -.259 | 4.27 | - |
| REDSC | 51.25 | 8.75 | 52.19 | 8.95 | -1.04 | .30 | -2.69 | .821 | - |
| REFSC | 63.90 | 9.41 | 62.65 | 9.24 | 1.31 | .29 | -.617 | 3.11 | - |
| PSE | 31.29 | 7.31 | 30.98 | 7.03 | .42 | .67 | -1.13 | 1.75 | - |
| JSS | 68.91 | 17.0 | 70.53 | 15.6 | -.97 | .33 | -4.87 | 1.65 | - |
| EJS | 36.00 | 9.32 | 37.73 | 8.47 | -1.91 | .05 | -3.51 | .044 | .20 |
| IJS | 32.91 | 8.56 | 32.80 | 7.91 | .142 | .88 | -1.52 | 1.76 | - |

*Note.* M=Mean, SD=Standard Deviation, CI=Confidence Interval, LL=Lower Limit, UL=Upper Limit, JPSE=Job performance Self-Rating, JPSR= Job Performance Supervisor, SCS= Self-control Schedule, REDSC=Redressive Self-control Scale, REFSC=Reformative Self-control scale, PSE=Perceived Self-efficacy Scale, JS= Job Satisfaction Scale, EJS=Extrinsic Job Satisfaction Scale, IJS=Intrinsic Job Satisfaction Scale. ***$p$<.001. **$p$<.01. *$p$<.05.

Table 4. Mean, Standard Deviation and One-Way Analysis of Variance on Study Variables Across Designation (N=400)

| | Doctors (*n* = 253) | | Nurses (*n* =90) | | Paramedical Staff (*n*= 56) | | | | *95%CI* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variable | M | SD | M | SD | M | SD | F | i-j | $\eta^2$ | LL | UL |
| JPSLR | 29.26 | 3.83 | 30.12 | 4.58 | 31.08 | 3.83 | 5.34(2,397)** | P>N>D | .00 | 59.24 | 60.4 |
| JPS | 30.33 | 3.2 | 29.95 | 3.58 | 29.33 | 4.04 | 2.07(2,383) | - | .02 | 29.31 | 30.11 |
| SCS | 145.59 | 17.12 | 145.18 | 15.13 | 150.2 | 18.7 | 1.81(2,393) | - | .00 | 144.45 | 147.85 |
| RDSC | 51.17 | 9.05 | 51.96 | 9.04 | 53.43 | 7.28 | 1.54(2,391) | - | .00 | 50.79 | 52.54 |
| RFSC | 62.89 | 9.13 | 63.26 | 8.93 | 65.6 | 10.7 | 1.94(2,387) | - | .00 | 62.43 | 64.28 |
| PSE | 31.63 | 7.21 | 30.06 | 6.48 | 30.72 | 7.99 | 1.66(2,394) | - | .00 | 30.44 | 31.87 |
| JSS | 67.04 | 15.56 | 72.33 | 17.17 | 77.07 | 16.23 | 10.48(2,395)*** | P>N>D | .00 | 68.01 | 71.24 |
| EJS | 35.18 | 8.5 | 38.73 | 9.54 | 40.8 | 8.47 | 12.27(2,395)*** | P>N>D | .05 | 35.87 | 37.64 |
| IJS | 31.86 | 7.87 | 33.6 | 8.59 | 36.27 | 8.69 | 7.06(2,395)** | P>N>D | .03 | 32.05 | 33.68 |

*Note.* M=Mean, SD=Standard Deviation, CI=Confidence Interval, LL=Lower Limit, UL=Upper Limit, JPSLR =Job performance Self-Rating, JPS= Job Performance Supervisor, SCS= Self-control Schedule, RDSC=Redressive Self-control Scale, RFSC=Reformative Self-control scale, PSE=Perceived Self-efficacy Scale, JSS= Job Satisfaction Scale, EJS=Extrinsic Job Satisfaction Scale, IJS=Intrinsic Job Satisfaction Scale. ***$p$<.001. **$p$<.01. *$p$<.05.

## 5. DISCUSSION AND CONCLUSION

The purpose of the current research was to determine the relationships among job satisfaction, learned resourcefulness, and job performance. It was also intended to determine the role of demographics and their impact on job performance. The objective of the study was to observe the relationships among the study variables and their relationships with demographics. The results of the correlation matrix suggested that all scales and subscales have established and strong directional potential to measure their respective variables among frontline healthcare workers. In the second hypothesis, it was proposed that job performance is positively related to job satisfaction and learned resourcefulness. Prior studies have shown that job performance is positively related to job satisfaction and learned resourcefulness (Inayat & Khan, 2021; Joelle & Coelho, 2019; Platis et al., 2015). A rational justification could be inferred from these studies that when healthcare workers are satisfied with their jobs, they are more resourceful to cope better through challenging situation ultimately improving the level of job performance.

Subsequently, it was hypothesized that age is positively related with job performance, learned resourcefulness, and job satisfaction. The results are parallel with previous studies which reported that age has positive association with job performance and job satisfaction (Gudeta, 2015; Khan et al., 2011; Zaman et al., 2022). Similarly, literature suggested the positive association between job performance and learned resourcefulness (Yildirim et al., 2007). It was also hypothesized that income is positively related to job performance among frontline healthcare workers. These findings are aligned with earlier studies, which reported that monthly salaries are one of the motivating factors for job performance. The findings are consistent with the literature, which reports that issues such as workload, work-family conflict, poor doctor-patient relationship, inadequate supervision, limited training opportunities, low salary, and limited financial benefits may have a detrimental impact on job satisfaction (Kumar et al., 2013; Shi et al., 2014). The possible reasons for this variation may be the greatest dissatisfaction with payments and benefits. Healthcare professionals are mainly concerned about salary difficulties due to their impact on living standards, in turn, creating a sense of security. As a result, dissatisfaction with low salaries is widespread across different occupations. Many managers believe that rewarding staff with money, bonuses, or raises is the key to motivating and delighting service employees. It has been hypothesized that working hours is negatively correlated with job performance, learned resourcefulness and job satisfaction among frontline healthcare workers. Previous literature revealed

that long working hours have negative correlation with job satisfaction and job performance among healthcare workers (Dall'ora et al., 2015; Zaman et al., 2022). A possible explanation for this finding is that long working hours negatively affect sleep hygiene. A sleep-deprived individual cannot consistently force themselves to stay conscious and alert. Sleep deprivation hinders various forms of performance, including the ability to focus, react quickly, and recall and learn new knowledge and motor skills (Goel et al., 2009). The study also found that job satisfaction acts as a mediator between learned resourcefulness and job performance. The mediating effect of job satisfaction has been studied in previous research (Cho & Kim, 2022), which found that resourceful healthcare workers have a greater sense of satisfaction, leading to better job performance.

Findings further indicated that, among frontline healthcare workers, males and females did not show significant differences in job performance, learned resourcefulness, job satisfaction, or intrinsic job satisfaction. There was a significant difference in extrinsic job satisfaction between male and female frontline healthcare workers. The results of the study indicated significant differences in job performance self-rating, job satisfaction, and extrinsic and intrinsic job satisfaction across designations. The comparison further showed that paramedical staff scored higher on job performance, job satisfaction, and extrinsic and intrinsic job satisfaction than doctors and nurses. These results are consistent with a prior study that found that doctors have lower job satisfaction than nurses and medical technicians (Lu et al., 2016). This type of emotion among dissatisfied doctors is attributed not only to the professional characteristics of doctors, nurses, and medical technicians, but also to the fact that doctors undergo a longer education and training process than nurses and medical technicians, and that their work is more demanding and dynamic. They are not only confronted with patients' problems and requests but also with the rapid advancement of medical technology, which demands learning and research outside working hours. The shift, in particular, reinforces doctors' performance responsibility and strict criteria for doctor-patient contact, compelling them to work in an environment with relatively long hours and high work stress, leading to dissatisfaction with the system.

Results of the present study highlighted the psychosocial predictors of job performance. The psychological predictors examined in this research were learned resourcefulness, perceived self-efficacy, and extrinsic job satisfaction. The findings revealed that frontline healthcare workers with high levels of learned resourcefulness, perceived self-efficacy, and extrinsic job satisfaction demonstrated better job performance. Considering mean

differences, there were non-significant results for gender differences in job performance and learned resourcefulness, except for extrinsic job satisfaction. Job performance, redressive self-control, reformative self-control, and job satisfaction showed significant differences based on gender and designation.

There are some limitations of the present study that could limit generalizability, as well as some suggestions for future studies. Despite efforts to include as much as possible in this study, due to resource and time restrictions, the following shortcomings must be addressed in the future. First, data were collected through a self-reported questionnaire, which has inherent drawbacks, such as the social desirability bias. Social desirability and under/overrating might be impediments to a clear picture of job performance. Second, the data were collected in a few cities in Pakistan, which may limit the generalizability of the findings. For better generalizability, data must be collected from other cities as well. Finally, this study has investigated the relationship between job satisfaction and learned resourcefulness. In the future, scholars should also consider the impact of other variables such as emotional intelligence, work stress, work motivation and commitment.

The present study provided theoretical implications for further investigation of the postulated relationship between job performance, job satisfaction, and learned resourcefulness, with satisfaction as a mediating factor between learned resourcefulness and job performance. The findings of the present study can also have practical significance for the establishment of preventative initiatives to promote job satisfaction. These interventions should focus on improving job satisfaction sources such as perceived ability to provide quality patient care, positive relationships, respect from superiors, supportive leadership, good remuneration, competitive pay and bonuses, involvement in designing personal work obligations, job security, self-growth through professional training and job progress, job autonomy, decision-making chance, and development of integrative approaches.

The components of learned resourcefulness can be used by counselors and psychologists in their interventions to enhance frontline healthcare workers' job performance. Furthermore, this study's findings suggest that therapies and policies can be developed to enhance job satisfaction among frontline healthcare workers. Allowing frontline healthcare professionals to take breaks and rotate care duty for critical patients may allow exhausted bodies and brains to momentarily escape the stressful environment and heal therein.

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