

RESEARCH ARTICLE

Job satisfaction, performance appraisal, reinforcement and job tasks in medical healthcare professionals during the COVID-19 pandemic outbreak

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Abstract

Medical healthcare profession is under immense stress since the COVID-19 pandemic outbreak on global scale, and medical healthcare professionals are enduring occupational challenges which entail frontline and non-frontline duties, appraisal and satisfaction with their job. The present study examined perceived job satisfaction as a mediating variable that affects the relationship between performance appraisal and reinforcement on performing job tasks among medical healthcare professionals during COVID-19. A sample ($N = 550$) was selected from public and private hospitals' medical healthcare professionals ($n = 300$ males, and $n = 250$ females). The results showed that perceived job satisfaction mediates the relationship between performance appraisal and reinforcement on job tasks in medical healthcare professionals. This study could help stakeholders, medical board regulations, mental health practitioners, employers and employees to increment sources which could establish feasible healthcare planning and management. The study has significant implications in mental healthcare, crisis management, human resource planning, effective performance and improvement in well-being of medical workforce's psychological health.

KEYWORDS

COVID-19, job satisfaction, medical professionals, performance appraisal, reinforcement, well-being

Highlights

- Medical healthcare providers as employees in a hospital are experiencing occupational challenges during the COVID-19 pandemic.
- Perceived job satisfaction mediates the relationship between performance appraisal and reinforcement in their assigned frontline or non-frontline job tasks during COVID-19 pandemic.
- Mental healthcare planning and management of medical healthcare professionals is vital to ensure the availability of health services.

1 | INTRODUCTION

Medical healthcare workers in direct contact with the coronavirus cases are more vulnerable to both high risk infection and mental health problems. COVID-19 pandemic outbreak has significant impact on medical healthcare workers' jobs and occupation related factors. This entail job tasks during high risk of infection, minimal reinforcement and performance appraisal, inadequate equipment for safety from contagion, isolation, exhaustion, and lack of contact with support systems.¹ However, quality and number of job-activities (outdoor or emergency) beside perceived satisfaction with the job holds significant value especially among healthcare sector employees.²⁻⁴ Further this fight for-flight from-freeze within the job situation presents the tug of war of psychological factors which constitutes perceptions and appraisal especially under crisis and stressful circumstances. Appraisal system influences perception of job satisfaction and decrease the turnover in the hospitals even with the high work pressure. Another factor, reinforcement is an attractive motivation that increases employees' productivity in their jobs through rewards and reinforcers.^{5,6} Job tasks plays a significant role which generates the employees' opportunities and sustainability within an occupational setting.⁷ The hospital regulation has become a significant factor of health system's stability during the COVID-19 pandemic. Since the management of healthcare sector coexists with their committed health care professionals and thus its fundamental role should be the psychological wellbeing and mental health of medical workforce.

Performance appraisal is a formal process for proper evaluation of all employees' appraisal of inner characteristics to expand the commitment, productivity, performance of employees. Performance appraisal and employees' satisfaction may depend on the equal opportunities, fairness in appraisal system, impact of job tasks, workload compensation, and motivation towards personal and career growth, performance appraisal through rewards and applause, safety and security, compensation of over-time, and reinforcers towards their job activities.⁸ Medical healthcare employees are more productive, have best performance with improved well-being when they are recognised by their hospital infrastructure's cooperation (included provision of safety and security). Thus a compelling performance appraisal framework is imperative for satisfactory performance, for identifying medical employees' state of mind (burnout, exhaustion, negative emotions, psychological distress, and occupational stress) during crisis, and incorporating practices to shape constructive hospital administration.⁹⁻¹¹

Job tasks are fundamental practices to appraise the knowledge and competence of any employee in any sector to achieve their tasks proficiently. Job tasks composed of learning knowledge, internal hierarchical movement, identifying necessity and developing the need-based tasks for workers' efficiency and accomplishment. Job satisfaction and reinforcement in a job task is a product to enhance and improve the viability of an administration vicariously through the positive impact on the performance of their employees. The existence of a healthcare organisation lies in its ability to satisfy their healthcare sector employees by expanding their performance and raising competitive edge. Job tasks are imperative for positive endeavours in healthcare workers to enhance their execution of tasks by expanding their capacities.

1.1 | Psychological theories

Reinforcement theory explains how to achieve optimal workplace functioning through reward and reinforcement by overall increasing the psychological well-being of employees. Social learning theory in work explains that by observing diverse individuals performing activities tend to reciprocate the same in other employees.¹² As stated by Maslow (1971), motivation is a complex and vigorous process where insight and learning is necessary to execute any function.¹³ Motivation could provide a bridge between the tangible or intangible reinforcement. Reinforcement could be monetary or non-monetary – it deals with rewards and skills, respectively. The objective of monetary reinforcement is to strengthen the confidence of employees. Employees prefer a reinforcement framework that is persistent, fair, and commensurate with their productivity and skills, additional time pay, and flexible working hours.¹⁴ Not only extrinsic but intrinsic motivation could enhance thinking level to perform adequately and sufficiently of the health sector employees. Reinforcement is essential for both individuals and organisations, as from employer's perception reward gives satisfaction to employees' needs and from employees' perception reinforcement motivated them towards their desired goal, enhance productivity and a symbol of being valued by their organisation.¹⁵ Extrinsic reinforcement is the most effective benefit for the employee like, pension arrangement, insurance facility, personal loan and fringe benefits invoke a dimension of certainty and provide framework of job satisfaction and a sense of association including psychological well-being.¹⁶⁻¹⁸ Intrinsic reinforcement invokes healthy state of mind, sound psychological health and a sense of association through recognition, verbal appreciation, acknowledgement, which increment the work inspiration and empowerment.¹⁹

Perceived job satisfaction is a positive, optimistic feeling towards the job of the employees. It is a well-being and a state of mind towards job aspects, occupation and meaning of a job. Negative or positive emotions are concerned with the employees' perception towards their job which is established inward or outward.²⁰ Job satisfaction can be demonstrated through feeling/perception of satisfaction for the job, approval/disapproval of salary received, career opportunity, relationship with management, and satisfaction of relationships with colleagues and coworker. They could also be in the form of consecutive shifts, occupational wellbeing, work security, work place professional stability and correspondence in general healthcare sector employees.

Perceived job satisfaction tends to center around cognitive aspect of an association which builds job performance/productivity and strengthen individual's wellbeing of representative work identity.²¹ Perceived job satisfaction is an issue of attention because they connect a social institution connected to other social institutions. Higher the perceived satisfaction with the job means higher the performance and productivity will be in health sector employees. A satisfied worker can increment hierarchical productivity through less diversion and more regards for the job (Figure 1).

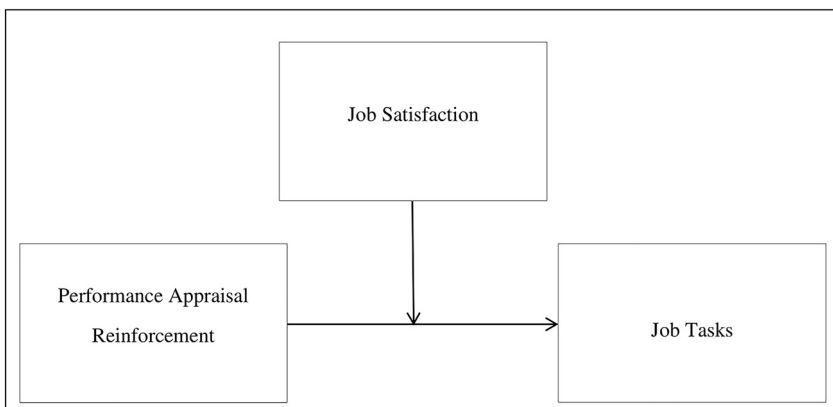


FIGURE 1 The hypothesised model of the research

1.2 | Operational definitions

Job Satisfaction. It is defined as 'the attitude of a worker towards his or her job, often expressed as a hedonic response of liking or disliking the work itself, the rewards (pay, promotions, recognition), or the context (working conditions, colleagues)' (American Psychological Association, 2022).

Performance Appraisal. It is defined as 'a formal appraisal of an employee's job performance, typically conducted by his or her supervisor at least once a year. The review may be in the form of a quantitative rating or a more subjective appraisal and usually involves feedback to the employee. Also called performance appraisal; performance assessment; performance evaluation' (APA, 2022).

Reinforcement. It is defined as 'the procedure that results in the frequency or probability of a response being increased in such a way' (APA, 2022).

Job Tasks. It is defined as 'the general categories of tasks or duties that define the nature of a particular job, such as clerical duties, receptionist duties, or decision-making responsibilities' (APA, 2022).

2 | METHOD

2.1 | Sample

The sample was composed of $N = 550$ medical healthcare employees ($n = 300$ males, and $n = 250$ females) of public and private hospitals. The sampling technique was purposive sampling and the research method was survey method. A 550 study sample (with a 100% response rate) was recruited from 21 hospital facilities from Lahore, Pakistan – an epicentre of COVID-19 in Pakistan. The study was conducted at the peak of COVID-19 through telephone survey as the access to frontline and non-frontline medical staff was largely classified, movement restricted and correspondence limited. The individual study participants were selected through purposive sampling and the data was collected through telephone correspondence. The reasons of telephone survey research method were: coronavirus lockdown and quarantine; limited access of non-emergency personnel at COVID-19 and other medical facilities; and the only approved access to medical healthcare employees by medical authorities in Pakistan.

2.2 | Assessment measures

Demographic Information Questionnaire: A demographic information questionnaire based on the research literature was devised to gather demographics information including age and gender.

Factors of Occupational Wellbeing: Satisfaction, Appraisal, and Reinforcement: The questionnaires were constructed and adapted to gather employees' perception of job satisfaction, performance appraisal, reinforcement, and job tasks. A comprehensive questionnaire was comprised of 30 questions including perceived job satisfaction (6 items) performance appraisal (10 items), reinforcement (9 items), and job tasks (5 items). The sample items for assessing job satisfaction included 'sense of accomplishment I get from the job', performance appraisal included 'received mentoring for my work', reinforcement included 'paid vacation based on my performance', and job tasks 'duties I perform'. The Cronbach's alpha (α) for the current study was perceived job satisfaction ($\alpha = 0.85$), performance appraisal ($\alpha = 0.80$), reinforcement ($\alpha = 0.70$) and job tasks ($\alpha = 0.72$). All items answered to a 5 point Likert scale, the options were 5 strongly agree, 4 agree, 3 neutral, 2 disagree, and 1 strongly disagree.

2.3 | Ethical consideration

In order to conduct this research, ethical consideration was strictly followed including briefing to the authorities, informed consent to the healthcare employees, and assurance of anonymity, privacy and confidentiality. Ethical concerns regarding the identity and participants' data were ensured in the handling of research data. Ethical issues related to the confidentiality of the participants and hospitals' privacy were treated in a manner that ensures the confidentiality and anonymity of the participants and organisations involved. A formal deliverance by briefly describing the objective of the study, potential impact of the study and the possible outcome of the research were delivered. All participant of the research received information about the research and they also consent for their willful participation. Ethical consideration includes the appropriate method and avoidance of incorrect reporting and inappropriate use of information was ensured.

3 | RESULTS

The main objective of this study was to investigate the mediating role of perceived job satisfaction on performance appraisal, reinforcement and job tasks. Age of the participants was 25–34 ($N = 550$, $M = 2.12$, $SD = 0.67$). Correlation was carried out to see the relationship between study variables; hierarchical regression analysis was used to see the mediation effect of study variables. To analyse the results the statistical software SPSS 21.0 has been used. Firstly, the reliability of the data was checked through the value of Cronbach's alpha. To check the hypothesis for mediation, Hierarchical regression analysis has been used. Data normality test was used to confirm normality of data distributed normally with data normality test. It included histogram skewness & Kurtosis and P. Plots.

Pearson product moment correlations were calculated to see the relationship of demographic variables, perceived job satisfaction, performance appraisal, and reinforcement and job tasks among healthcare employees. To further analysis, in order to test the assumption of independence of errors, The Durbin-Watson statistic was totalled and the value of 1.5 supported the assumption. A relatively random display of points where the spread of errors appears approximately similar over the values of independent variables provided the support for homogeneity of variance. For testing the assumption of multicollinearity, Tolerance values were assessed which should be 0.1, for the present study the values were in the specified range for all variables. Hence, no multicollinearity was observed in the data.²² The results at Tables 1–4 indicated that Perceived Job Satisfaction mediates the relationship between performance appraisal and reinforcement on job tasks. Overall it was observed that perceived job satisfaction mediated the relationship among performance appraisal, reinforcement and job tasks of employees of healthcare sector.

TABLE 1 Correlations among demographics and study variables

| | 1 | 2 | 3 | 4 |
|----------------------------|--------|--------|--------|---|
| Performance appraisal | 1 | | | |
| Job tasks | 0.64** | 1 | | |
| Reinforcement | 0.73** | 0.73** | 1 | |
| Perceived job satisfaction | 0.52** | 0.61** | 0.59** | 1 |

$p < 0.01$ **, $p < 0.05$ *.

TABLE 2 Hierarchical regression analysis of mediating effect of perceived job satisfaction on performance appraisal ($N = 550$)

| Model | SEB | B | T | p |
|--|------|------|------|--------|
| Step I ($R^2 = 0.12, \Delta R^2 = 0.1$) | | | | |
| Control variable | | | | |
| Age | 0.28 | 0.21 | 0.16 | 0.05* |
| Step II ($R^2 = 0.26, \Delta R^2 = 0.13$) | | | | |
| Performance appraisal | | 0.34 | 0.25 | 0.01** |
| Step III ($R^2 = 0.29, \Delta R^2 = 0.03$) | | | | |
| Perceived job satisfaction | | | 0.22 | 0.01** |

$p < 0.01^{**}, p < 0.05^*$.

TABLE 3 Hierarchical regression analysis of mediating effect of perceived job satisfaction on perceived job tasks ($N = 550$)

| Model | SEB | B | T | p |
|--|------|------|------|--------|
| Step I ($R^2 = 0.12, \Delta R^2 = 0.01$) | | | | |
| Control variable | | | | |
| Age | 0.28 | 0.23 | 0.16 | 0.05* |
| Step II ($R^2 = 0.17, \Delta R^2 = 0.04$) | | | | |
| Job tasks | | 0.14 | 0.11 | 0.01** |
| Step III ($R^2 = 0.24, \Delta R^2 = 0.06$) | | | | |
| Perceived job satisfaction | | | 0.37 | 0.01** |

$p < 0.01^{**}, p < 0.05^*$.

TABLE 4 Hierarchical regression analysis of mediating effect of perceived job satisfaction on reinforcement ($N = 550$)

| Model | SEB | B | T | p |
|--|------|------|------|--------|
| Step I ($R^2 = 0.12, \Delta R^2 = 0.01$) | | | | |
| Control variable | | | | |
| Age | 0.28 | 0.20 | 0.16 | 0.05* |
| Step II ($R^2 = 0.24, \Delta R^2 = 0.12$) | | | | |
| Reinforcement | | 0.27 | 0.18 | 0.01** |
| Step III ($R^2 = 0.02, \Delta R^2 = 0.02$) | | | | |
| Perceived job satisfaction | | | 0.23 | 0.05* |

$p < 0.01^{**}, p < 0.05^*$.

4 | DISCUSSION

The current study was aimed to explore the mediating role of perceived job satisfaction in performance appraisal and reinforcement on job tasks among medical healthcare employees amidst the COVID-19 pandemic outbreak. A theoretical and practical framework has been drawn from the literature review to elucidate the critical role of perceived job satisfaction in the healthcare setting of medical healthcare employees. Different theories have stressed on the significance of perceived job satisfaction for the overall well-being of an individual, social learning theory focussed on

job tasks as tools to develop and enhance employees' skills.²³ Reinforcement theory motivated the reward system to enhance the performance of employees.²⁴ Resource theory supported the organisational and individual performance through competitive improvement and thorough job tasks.²⁵

The findings of this study highlighted the perceived job satisfaction's mediating role with job task as job tasks could be a device to increase the perceived job satisfaction of employees as the job tasks enhanced the association of general viability and level of satisfaction.^{3,26} Distinctive theories and some researches have stressed the understanding of connection between performance appraisal and employee satisfaction. Goal-Setting theory suggested a degree of objective accomplishment embedded into the subjective feelings of satisfaction.²⁷ Performance appraisal can possibly expand employees' feelings towards their job and towards their management of healthcare. The current finding was also showed the correlation between age and perceived job satisfaction as in the job experience and age are found significantly correlated like previous research, the higher the age, the higher the perceived job satisfaction, this could be due to the adaptability of emergency situations in a hospital or emergency wards amongst older healthcare employees.²⁸ Performance appraisal activities can divulge the employees' work improvement. Productive performance examination framework provides satisfaction level of employees through their diligent work, vigilant reasoning and association with the organisation.²⁹

Another finding of current study's indicated that the performance appraisal is a measure to enhance and boost the performance of employees and pave a way for career opportunity, promotion and further rewards. Previous research has indicated the mediating relationship between performance appraisal and perceived job satisfaction of healthcare sector employees.^{30,31} Performance appraisal could act as an apparatus to identity and enhance productivity, personally and professionally.³²

Literature concerning reinforcement has indicated the role of reinforcement as a tool for personal growth, be it tangible or intangible.^{33,34} And the present study has indicated the mediating effect of perceived job satisfaction and reinforcement in the healthcare employees. Performance appraisal, reinforcement and job tasks are few ways through which employers can identity perceived job satisfaction of the employees and its significance is imperative for collective and growth and wellbeing of medical healthcare employees. According to Herzberg's theory, it sets goals and motivation, extrinsic and intrinsic motivation towards the achievement of goals as intrinsic motivation could serve the motivational reinforcement and extrinsic motivation (salary benefits, bonus, promotion, sponsored trips) ensures further reinforcement towards career growth. In the conclusion, perceived job satisfaction could be determined by employees' commitment, career opportunities in the organisation, equal opportunities, authorities' attitudes and behaviours towards the needs and issues of employees, colleagues' conduct towards each other and security from the job.

5 | CONCLUSION

Medical healthcare regulations could collaborate with mental health practitioners to device further frameworks for the wellbeing of their employees' wellbeing and performance and hospital's productivity.³⁵ This study provides an advantageous opportunity to focus on the holistic wellbeing of employees working in healthcare sector. This paper addressed medical healthcare workers as employees because despite their contributions in the frontline/non-frontline during COVID-19, they are employees working in an organisational setup. And like other sectors' employees experiencing workplace challenges and facing familiar stressors whose job satisfaction relates with their performance appraisal, reinforcement and job related activities.

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CONFLICT OF INTEREST

No conflict of interest.

ETHICS STATEMENT

Authors report no conflict of interest. The study received no funding.

AUTHOR CONTRIBUTIONS

Waleed Rana: Supervised the project and is responsible and accountable for the accuracy or integrity of the work. Waleed Rana (principle investigator) collected, statistically analysed and interpreted the data. Sonia Mukhtar: Prepared the manuscript and enhanced conceptual understanding. Shamim Mukhtar: Collected the literature review and wrote the draft.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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