

Relationship Between Organizational Justice and Job Satisfaction Among Nurses working in Hamadan Hospitals in 2024: A cross-sectional study

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Abstract

Background Healthcare centers play a vital role in ensuring the health of the entire population, and nursing staff, in particular, play a significant role in improving health-related indicators in these centers. Attention to organizational justice in these personnel has always been of interest to increase their job satisfaction. This study examined the relationship between organizational justice with job satisfaction of nurses in hospitals affiliated with Hamadan University of Medical Sciences.

Methods This descriptive cross-sectional study included all nurses in educational hospitals in Hamadan in 2024. A total of 210 nurses were selected through stratified random sampling based on inclusion criteria from nurses in educational hospitals in Hamadan. Data were collected using three questionnaires: a demographic information questionnaire, the Organizational Justice Questionnaire (Niehoff & Moorman), and the Minnesota Satisfaction Questionnaire (MSQ). Data analysis was performed using descriptive statistics (mean and standard deviation) and inferential statistics (Pearson correlation coefficient and regression analysis) in SPSS version 22.

Results The findings indicated that organizational justice was moderate (47.99 ± 8.27), whereas nurses' job satisfaction was low (39.34 ± 6.11). A positive and significant correlation exists between organizational justice and nurses' job satisfaction ($r = 0.52$; $p < 0.05$).

Conclusion Given the positive relationship between organizational justice and nurses' job satisfaction, it is recommended that managers focus on the various dimensions of organizational justice to promote more effective management and ultimately improve nurses' job satisfaction.

Keywords Job Satisfaction, Nurses, Perception, Leukemia, Neoplasms

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1 Introduction

Hospitals and healthcare centers are among the most stressful work environments, where nurses represent the largest group of personnel.^[1] In nearly all hospital settings, nurses are the first group of healthcare professionals that patients encounter and who remain with them throughout their recovery process.^[2] However, a shortage of nurses in many countries has created significant challenges.^[3] Despite the shortage of nursing staff, nurses are assigned a wide variety of tasks, including direct patient care, facilitating communication among healthcare staff, physicians, patients, and families, and providing education to patients and their companions. These are just a fraction of the visible and invisible challenges associated with the profession.^[4] One of the factors influencing nursing performance is “job satisfaction.”^[5] Job satisfaction is a positive emotional state resulting from the evaluation of one’s job or job experiences, reflecting the extent to which individual expectations are met in the workplace.^[6] It encompasses a set of feelings and beliefs that individuals have about their current job. Job satisfaction is a crucial factor in professional success, as it contributes to increased efficiency and personal fulfillment. Employees who are dissatisfied are more prone to mental and physical health problems.^[7] In a study conducted on nurses, job dissatisfaction was found to be associated with psychological issues, emotional exhaustion, heightened anxiety, stress, and depression.^[8] Both intrinsic and extrinsic motivations influence job satisfaction and play a critical role in guiding behavior and enhancing workplace performance. Motivated employees are more engaged, perform their duties effectively, and show a stronger enthusiasm for their work, particularly when personal interests align with job responsibilities.^[9] Job satisfaction is a core component in assessing organizational effectiveness. It reflects employees’ feelings toward their work and has a significant impact on both individual and organizational performance. Therefore, enhancing job satisfaction motivates employees to engage in behaviors that facilitate productivity and effective job performance.^[10] Attracting, retaining, and satisfying staff depends on factors such as a trustworthy, supportive, and merit-based environment, all of which are rooted in organizational culture and shaped by organizational justice.^[11] One specific work attitude that affects health and well-being and is a determinant of other workplace factors is “organizational justice.”^[12] Organizational justice refers to the fair and equitable treatment of employees by organizations, encompassing four dimensions: distributive, procedural, interpersonal, and informational justice.^[13] Distributive justice relates to the perceived fairness of outcomes such as pay and promotions.

^[14] It exists when outcomes are fairly allocated based on employees’ skills and contributions.^[15] Employees perceive distributive fairness by comparing their input-output ratio to that of others. Procedural justice is another aspect, involving the fairness of procedures and processes used to determine outcomes. Interpersonal justice reflects the degree to which managers treat employees with respect and dignity.^[16] Informational justice concerns the quality, clarity, and adequacy of information regarding outcome distributions and decision-making processes.^[13] Organizational justice is closely tied to employee health and well-being. It has been shown that low perceptions of justice are associated with stress responses and physiological and behavioral consequences, including inflammation, sleep disturbances, cardiovascular dysregulation, cognitive impairment, and increased absenteeism.^[17] In complex systems, particularly in essential public sectors such as healthcare, organizational structures often lack coherence and transparency, resulting in perceived injustices.^[18] Perceptions of organizational injustice among nurses may lead to increased job stress and a range of physical and psychological symptoms.^[19] Although the relationship between organizational justice and job satisfaction has been investigated in various Iranian studies, workplace conditions and organizational factors differ across environments, resulting in diverse outcomes. Given the critical role of nurses in teaching hospitals and the direct impact of their job satisfaction on the quality of healthcare services, this study was conducted in Hamadan to gain a deeper understanding of this relationship in a localized context. The findings can also inform managerial decision-making in hospitals throughout the region. Improving organizational justice can enhance job satisfaction among nurses, reduce turnover, and decrease job-related conflicts, anxiety, and depression. Therefore, this study aims to determine the relationship between organizational justice and job satisfaction among nurses in hospitals affiliated with Hamadan University of Medical Sciences.

2 Methods

This study was a descriptive, cross-sectional correlational research conducted in 2024 in teaching hospitals affiliated with Hamadan University of Medical Sciences. The study population included all nurses employed at these teaching hospitals. Sampling was carried out using quota sampling. The sample size was determined using Cochran’s formula, considering a statistical population of 1,214 nurses across the mentioned hospitals, resulting in a sample of 210 nurses. Proportional quota sampling was applied based on the number of nurses at each hospital: 84 from Be’sat Hospital (486 nurses), 36 from Shahid Beheshti Hospital (209 nurses), 29 from Farshchian

(Sina) Hospital (169 nurses), 27 from Ekbatan Hospital (158 nurses), 24 from Farshchian Heart Hospital (139 nurses), and 10 from Fatemieh Hospital (53 nurses).

Based on a previous study by Yaqoubi et al., titled “The relationship between organizational justice and job satisfaction and organizational commitment among employees of selected hospitals of Isfahan University of Medical Sciences”^[20], and assuming a correlation coefficient of 0.19, a confidence level of 95%, and a type II error rate of 20%, the required sample size was calculated as 196. Considering a 15% potential non-response rate, the final sample size was set at 210 participants, using the following formula:

$$C = 0.5 * \ln \left[\frac{1+r}{1-r} \right]$$

$$N = \left[\frac{(Z\alpha + Z\beta)}{C} \right]^2 + 3$$

Inclusion criteria included willingness to participate in the study, a minimum of six months of work experience in the current unit, and no managerial position. Incomplete questionnaires were considered exclusion criteria.

Data collection tools included a demographic questionnaire (age, work experience, gender, marital status, educational level, employment status, work shift, hospital ward, insurance type, and ethnicity), as well as the Organizational Justice Questionnaire and the Minnesota Job Satisfaction Questionnaire.

The Organizational Justice Questionnaire was developed by Niehoff and Moorman in 1993. It contains 20 items measuring three dimensions: distributive, procedural, and interactional justice. Responses are rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Items 1–5 assess distributive justice, items 6–11 assess procedural justice, and items 12–20 assess interactional justice. Total scores range from 20 to 100, with 20–47 indicating low perceived justice, 47.1–74 indicating moderate justice, and 74.1–100 indicating high perceived justice.^[21] The questionnaire’s validity was confirmed in the study by Munandar et al., with a Cronbach’s alpha of 0.65.^[22] In the present study, reliability was reassessed, and Cronbach’s alpha was calculated as 0.839.

The Minnesota Job Satisfaction Questionnaire (MSQ) was used to assess the job satisfaction of nurses. This tool includes 19 items across six dimensions: payment system (3 items), nature of the job (4 items), advancement opportunities (3 items), organization environment (2 items), leadership style (4 items), and physical conditions (3 items). Responses are scored on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). The total score ranges from 19 to 95, where scores between 19 and 38 indicate low job satisfaction, scores between 38.1 and 57 indicate moderate satisfaction, and scores

between 57.1 and 95 indicate high satisfaction.^[23] The questionnaire’s validity was confirmed in a study by Hossein Abbasi, with a Cronbach’s alpha of 0.85.^[8] In the current study, the alpha coefficient was calculated as 0.863.

Ethical approval for the study was obtained from the Ethics Committee of Hamadan University of Medical Sciences under the code IR.UMSHA.REC.1403.308. Sampling among nurses was conducted using quota sampling. Based on the total sample size ($n = 210$), the first step was to determine each hospital’s share of the sample by calculating the total number of nurses working in each hospital. This was followed by allocating the sample based on the number of nurses in each department and the hospital’s total share. Questionnaires were coded by the researcher and distributed anonymously in person to participants during their work shifts (morning, evening, and night).

After explaining the study objectives and obtaining written informed consent, participants were assured of the confidentiality of their responses. They were asked to complete the questionnaires at a time and in a location that was convenient and calm.

Finally, data were analyzed using descriptive statistics (frequency distribution, mean, and standard deviation) and inferential statistics, including Pearson correlation and regression analysis. All analyses were conducted using SPSS version 22. All statistical tests were analyzed and interpreted at a 95% confidence level.

3 Results

The data analysis revealed that out of 210 participants included in the study, the majority were female (56.2%), single (51%), held a bachelor’s degree (91%), were formally employed (39%), worked rotating shifts (44.8%), had social security insurance (57.6%), and identified as Persian speakers (53.8%). The mean age of participants was 32.33 ± 7.64 years, and the mean work experience was 9.27 ± 4.4 years (Table 1).

Among the dimensions of organizational justice, interactional justice had the highest mean score (2.63 ± 0.74), while distributive justice had the lowest (1.75 ± 0.53). According to the questionnaire criteria, the overall mean score for organizational justice was 2.39 ± 0.67 , indicating a moderate level of organizational justice. Regarding job satisfaction, the dimension of job type scored highest (2.57 ± 0.71), while opportunities for advancement had the lowest score (1.84 ± 0.81). The overall mean score for job satisfaction was 2.07 ± 0.77 , indicating a moderate level of satisfaction. Descriptive statistics for questionnaire dimensions are presented in Table 2.

Pearson correlation test results indicated a significant, moderate, and positive correlation between all dimensions of organizational justice and nurses' job satisfaction. Specifically, a relatively strong and significant positive

correlation was found between overall organizational justice and job satisfaction ($r = 0.52$, $p < 0.001$), indicating that greater organizational justice is associated with higher job satisfaction among nurses.

Table 1 Demographic Characteristics of Study Participants

Demographic Variables		Frequency	Percentage
Gender	Female	118	56.2%
	Male	92	43.8%
Marital Status	Married	103	49%
	Single	107	51%
Education Level	Bachelor's degree	191	91%
	Graduate degree	19	9%
Employment Status	Temporary contract	60	28.6%
	Fixed-term contract	33	15.7%
	Semi-formal contract	35	16.7%
	Formal employment	82	39%
Shift Type	Rotating	94	44.8%
	Fixed morning	54	25.7%
	Fixed evening	22	10.5%
	Fixed day (morning/evening)	22	10.5%
	Fixed night	18	8.6%
Insurance Type	Government employee	74	35.2%
	Complementary	13	6.2%
	Social Security	121	57.6%
	No insurance	2	1%
Ethnicity	Persian	113	53.8%
	Turk	38	18.1%
	Lur	17	8.1%
	Kurd	39	18.6%
	Other	3	1.4%
Mean age (years)		32.33 ± 7.64	
Mean work experience (years)		9.27 ± 4.4	

Table 2 Descriptive Statistics for Organizational Justice and Job Satisfaction Dimensions

Variable	Dimension	Mean (Based on items)	SD (Based on items)	Mean (Based on the Likert scale)	SD (Based on the Likert scale)
Organizational Justice	Distributive Justice	8.75	2.65	1.75	0.53
	Procedural Justice	15.55	4.06	2.59	0.67
	Interactional Justice	23.68	6.70	2.63	0.74
	Overall	47.99	8.27	2.39	0.67
Job Satisfaction	Payment System	4.70	1.60	1.56	0.53
	Job Type	10.30	2.87	2.57	0.71
	Advancement Opportunities	5.53	2.43	1.84	0.81
	Organization Environment	4.48	1.90	2.24	0.95
	Leadership Style	8.34	3.25	2.08	0.81
	Physical Conditions	5.97	2.53	1.99	0.84
	Overall	39.34	6.11	2.07	0.77

Table 3 Pearson Correlation Coefficients Between Organizational Justice Dimensions and Job Satisfaction

Variable	Significance	
Distributive Justice	Pearson Correlation	0.396
	P-value	< 0.001
Procedural Justice	Pearson Correlation	0.461
	P-value	< 0.001
Interactional Justice	Pearson Correlation	0.40
	P-value	< 0.001
Overall Organizational Justice	Pearson Correlation	0.52
	P-value	< 0.001

In the multiple linear regression model, organizational justice dimensions were entered simultaneously as predictor variables to explain the variance in the dependent variable, job satisfaction. The regression coefficients indicated that all three dimensions of

organizational justice had a significant positive effect on job satisfaction ($p < 0.05$). The model explained 30.3% of the variance in job satisfaction. The F-statistic (29.87) was also significant at the 99% confidence level ($p < 0.001$), indicating good model fit (Table 4).

Table 4 Multiple Regression Model for the Effect of Organizational Justice Dimensions on Nurses' Job Satisfaction

Predictor Variables	B	Standard Error	Beta	t	P-value	R	Coefficient of determination (R^2)	F	Durbin-Watson
Constant	12.03	2.95	-	4.07	<0.001	0.551	0.303	29.87	1.90
Distributive Justice	1.14	0.249	0.286	4.60	<0.001				
Procedural Justice	0.609	0.208	0.233	2.92	0.004				
Interactional Justice	0.329	0.120	0.207	2.73	<0.001				
Total Organizational Justice	0.514	0.059	0.520	8.78	<0.001				

Criterion Variable: Job Satisfaction

4 Discussion

The present study aimed to determine the relationship between organizational justice and job satisfaction among nurses in educational hospitals in Hamadan city. The results indicated that nurses' organizational justice in this study was at a moderate level. Sadeghi et al. (2023) also reported a moderate level of organizational justice among nurses in their study.^[24] Similarly, AbediKoushki et al. (2022) found a moderate level of organizational justice among nurses in their research.^[25] Conversely, Behnoori et al. (2022) reported a high level of organizational justice among nurses.^[26] Differences between hospitals and medical centers, facilities, workload, and the extent of organizational support can influence nurses' perceptions of justice. Changes in management methods, decision-making processes, and the distribution of resources, rewards, and benefits can alter employees' sense of justice. Furthermore, varying organizational cultures and communities across healthcare settings can be considered contributing factors to these discrepancies.

The results of the current study showed that nurses evaluated their job satisfaction as moderate. Ghorbanzadeh et al. (2022), in their study on nurses, likewise reported moderate job satisfaction, consistent

with the present study.^[27] Joodaki et al.^[28] and Razmi et al.^[29] also reported moderate job satisfaction among nurses in their respective studies, findings that are similar to the current study. In contrast, Eghtedar et al. (2023) reported a high level of job satisfaction among nurses.^[30] Jasemi et al. (2022) also reported a high level of job satisfaction among nurses.^[31] Differences in the results of studies on nurses' job satisfaction can stem from continuous and intertwined factors such as variations in hospital organizational culture, changing working conditions (including workload and job security), and individual characteristics of nurses, including differing expectations and resilience. Each of these factors directly or indirectly influences nurses' perception of job satisfaction.

The results of the present research demonstrated a significant and positive relationship between organizational justice and nurses' job satisfaction. Based on the Pearson correlation coefficient, this relationship was evaluated as moderate, indicating that as nurses' perceptions of organizational justice increase in their workplace, their job satisfaction also increases. Ekingen et al. (2023) showed a moderate positive relationship between organizational justice and job satisfaction in their study.^[32] Riono et al. (2022) also found a moderate positive relationship between organizational justice and nurses' job satisfaction.^[33] On the other hand, Munandar

(2022) demonstrated a strong positive relationship between organizational justice and job satisfaction.^[22] The variation in the strength of the relationship between organizational justice and job satisfaction across different studies can be attributed to several factors. Firstly, differences in organizational culture and leadership styles in various work environments play a key role; organizations with participatory cultures and supportive leaders tend to show a stronger relationship between these two variables. Secondly, the level of stress and workload experienced by nurses can moderate this relationship; in high-stress environments, even with organizational justice, job satisfaction might decrease due to burnout. Additionally, individual characteristics of nurses, such as their expectations and resilience levels, can differentiate their perception of justice and job satisfaction. Finally, specific organizational conditions, such as supportive policies or temporary crises, like the COVID-19 pandemic, may strengthen or weaken this relationship.

4 Conclusion

The study demonstrates a significant positive correlation between organizational justice and job satisfaction among nurses in hospitals affiliated with Hamadan University of Medical Sciences. This indicates that enhancing organizational justice can lead to improved job satisfaction. It is recommended that managers pay special attention to the dimensions of organizational justice to create better and more effective management, thereby increasing nurses' job satisfaction. Furthermore, healthcare managers must eliminate injustices and address the needs and desires of this personnel to foster an increased perception of justice. This factor will lead to greater satisfaction among patients and hospital visitors regarding the care provided by nurses.

Limitations

This study was conducted exclusively in the hospitals of Hamadan University of Medical Sciences, and working and managerial conditions in other centers may differ. Therefore, generalizing the results to other hospitals requires caution. The impact of organizational justice on nurses depends on factors such as their personality, work experience, management structure, and organizational policies, which can elicit varied responses. These characteristics can influence job satisfaction. Organizational justice and job satisfaction require further investigation and studies in most fields, particularly in organizations and healthcare centers. It is recommended that their relationship with other managerial variables, such as organizational commitment, organizational culture, organizational citizenship behavior, and turnover intention, be examined.

Declarations

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Authors' Contributions

All authors contributed to the initial concept, study design, data collection, and manuscript preparation. All authors reviewed and approved the final version and declare no conflicts regarding its content.

Availability of Data and Materials

The data and materials used in this study are available from the corresponding author upon reasonable request.

Conflict of Interest

The authors declare no conflict of interest in the publication of this article.

Consent for Publication

All authors have read and approved the final manuscript and provided their consent for publication.

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Ethical Considerations

This study was approved by the Ethics Committee of Hamadan University of Medical Sciences (Approval Code: IR.UMSHA.REC.1403.308, Project Number: 140305234176).

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