The Characteristics of the Nursing Organizational Management Highlighted by COVID-19

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Abstract. The COVID-19 outbreak has raised awareness of the importance of increased motivation and resilience in nurses. To explore the level of nurse Job involvement in Z hospital in Zhuhai city of China, and the influence of Organizational justice and Organizational identity, a total of 125 nurses in Z hospital in Zhuhai city, Guangdong province, were selected by convenient sampling method and investigated with general information questionnaire, Organizational justice, Organizational identity, and Job involvement Scale. There were 114 valid questionnaires returned; The scores of nurse's Organizational justice, Distributive justice, Procedural justice and Interactive justice, Organizational identity, and Job involvement were 3.532 ± 0.581 , 3.397 ± 0.691 , 3.487 ± 0.729 , 3.840 ± 0.641 and 3.912 ± 0.615 respectively. The score of organization justice positively correlated with the scores of Organizational identity ($r=0.627, P<0.001$), and positively correlated with the score of Job involvement ($r=0.627, P<0.001$). The scores of Organizational identity were positively correlated with the score of Job involvement ($r=0.724, P<0.001$). The results of regression analysis showed that Organizational justice, Organizational identity can positively affect nurses' Job involvement, and explained 59.9% of the cumulative variance. At the same time, Organization identity played a partial mediating role between Organizational justice, as well as its three sub-dimensions and Job involvement. The scores of Organizational justice and Job involvement in selected nurses in Zhuhai are only a little higher than the average levels, which needs to be improved. The perceived Interactive justice is high while the Distributive justice is low. Nurses' Job involvement and Organizational identity can be promoted directly by increasing Distributive justice, followed by Interactive justice and Procedural justice.

1 Introduction

At the G20 Summit, President Xi Jinping said that the global battle against COVID-19 should be fought resolutely. The COVID-19 outbreak has raised awareness of the importance of increased motivation and resilience in nurses. Nurses, as a special service industry, have met their survival needs from the perspective of human needs and career development, and the sense of organizational justice has become an appropriate level of work pursuit and life needs. Organizational identity and Organizational identity are important incentives for work enthusiasm and persistence investment.

Relevant conclusions can form the working methods of human resource management in hospital units, which can be applied to solve practical problems. Although based on the research of Zhuhai Third-grade A Hospital, it provides working solutions to the whole country, which determines its application value and prospect.

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2 Theoretical Review

2.1 Research on perceived organizational justice

At present, scholars have conducted a large number of studies on the components of organizational justice perception. Adams, Thibau and Walker, Bies and Moag and other authoritative scholars have successively proposed that Distributive justice, Procedural justice and Interactive justice are the three most important elements of organizational justice^{[1][2][3][4]}. In the nursing profession, most scholars' studies show that Distributive justice scores are the lowest, while leadership justice scores the highest^[5].

2.2 Research on employee involvement motivation

Recently, Research focus gradually moves from the negative job burnout to positive work into. Some scholars use role theory to explain the job involvement, refers to the individual through self control, self and self work uniform^[6], divided into vitality dedication and focus on the three dimensions^[7]. Also, the job involvement and job burnout are the two extremes^[8]. Most domestic scholars have found in studies that employees with a higher sense of justice in their work had better work involvement status^[9].^[10]. In the field of nursing, job involvement refers to a perfect job-related mood and cognitive state unique to the ego for medical work.

2.3 Research on organizational identity

2.4 Research on the Relationship between organizational justice, organizational Identity and Employee's Job involvement

The impact of perceived organizational justice on employees' job involvement: Most scholars believe that the overall level of Perceived organizational justice of nurses can better predict the overall level of Job involvement^[11].^[12].The influence on Organizational identification of organizational justice, Organizational justice has a positive effect on Organizational identification^[13].Organizational identification effects on employees' Job involvement: individual inputs for the degree of Organizational identification and Job seriously and work into a positive correlation^[14]. Most domestic scholars believe that enhance Organizational

identification can improve technician Job involvement^[15].^[16].^[17].

3 Objects and Methods

3.1 Objects

Z Hospital of Zhuhai city is a comprehensive third-class hospital, with 1500 beds and a total of 1740 employees. The outpatient emergency department of the hospital treats nearly 1.5 million patients every year, and the inpatient department also treats nearly 40,000 patients every year, and undertakes more than 25% of the tasks of medical and health institutions in Zhuhai. During the epidemic, the hospital also built a COVID-19 admission building to treat patients and COVID-19 outbreak. This indicates that the sample is typical. In this paper, nurses were selected as the investigation objects, and the correlation between the study variables was relatively obvious. Moreover, as the medical staff of third-class hospital are the front-line handlers of major national medical events, guaranteeing the life safety of the public, it is of certain significance to discuss their sense of Organizational justice, Organizational identity and Job involvement. Due to the time of investigation in will be coronavirus during the spread of the epidemic, research can only through online questionnaire distributed in Guangdong Z hospital, the data investigation to separate the two period of time, were working unit contains all hospitals nurses, a total of 125 questionnaires, after a rigorous screening, a total of 114 valid questionnaires were, recycling effective questionnaire is 91.2%. The valid questionnaires were put into SPSS software for analysis. We have got confirmation of informed consent by participants.

Table 1. Descriptive Statistics of samples (N=114)

Personal characteristic variable	standard of classification	N	Valid Percent (%)	cumulative percentage (%)
educational level	High school or technical secondary school	4	3.5	3.5
	junior college	19	16.7	20.2
	undergraduate course	83	72.8	93
	Postgraduate and above degree	8	7	100
average revenue per month (Chinese YUAN)	Below 3000 yuan	1	0.9	0.9
	3000-5999 yuan	32	28.1	28.9
	6000-8999 yuan	43	37.7	66.7
	9000-11999 yuan	28	24.6	91.2
labor relation	12000 yuan and above	10	8.8	100
	authorized strength staff	50	43.9	43.9
	Contract system staff	64	56.1	100
working years	Under 1 year	5	4.4	4.4
	1-3years (under 3 years)	17	14.9	19.3
	3 -5 years (under 5 years)	9	7.9	27.2

5-10 years (under 10 years)	14	12.3	39.5
10years above	69	60.5	100

3.2 Measuring tool and Research method

Organizational justice Scale refers to Xinyan Wang 's Organizational Justice Scale^[18],the overall Cronbach's coefficient of the scale in the study was 0.952.Job involvement scale adopts the Job involvement questionnaire compiled by scholars Wang Zhen et al., the total dimensional reliability coefficient in the literature and research data of this scale is around 0.95^[20]. Organizational Identity scale adopts the most widely used Organizational identity questionnaire in the academic world, and has been translated by Domestic scholar Wei Jun, the total dimensional reliability coefficient in the literature and research data of this scale is around 0.9^[20]. At the same time, the mean of several missing values is calculated and supplemented. SPSS 22.00 software was used for analysis: score comparison, mean comparison, one-way ANOVA and intra-group comparison were conducted for the study variables, followed by Spearman correlation analysis, multiple regression analysis and mediation test for the study variables to observe the relationship and demonstrate the hypothesis. This paper also use method include questionnaire, discussion method,the Delphi method and Empirical research method.

4 Research design

4.1Research framework

According to the research purpose and relevant theories and empirical studies, the following research framework is made to clarify the relationship between variables and make reasonable assumptions.

Figure 1 Research framework

Figure 1 reveals the research framework of the relationship between Organizational justice perception, Organizational identity and Job involvement: Perception of Organizational justice (independent variable) : variable 1: Distributive justice; Variable 2 Procedural justice; Variable 3 Interactive justice. Job involvement (dependent variable), Organizational identity (mediating variable). In addition, to ensure more stable data, gender, age and length of service, marital status, educational level, professional title, average monthly income and labor relationship were added as control variables.

5 Conclusion

The mean and standard deviation of Perceived organizational justice of nurses in Z third-class hospital were (3.532±0.581) point, and the mean scores of each dimension from high to low were: Interactive justice (3.639±0.691) point, Procedural justice(3.487±0.729) point, and Distributive justice (3.397±0.691) point. The total score of Organizational identity was (3.840±0.641). The total Job involvement was (3.912±0.615) point.

In the study, 114 nurses were selected as subjects to discuss the relationship between Perceived organizational justice and its three sub-dimensions, Organizational identity and Job involvement. SPSS22.0 statistical software was used for sample descriptive statistics, reliability analysis, score comparison, mean comparison, correlation and mediating influence test.

Table 2 Summary of hypothesis testing results

Research hypothesis	Result
H1 Perceived organizational justice has a significant positive impact on Job involvement	hypothesis verified
H1-1: Distributive justice has a significant positive effect on Job involvement	
H1-2: Procedural justice has a significant positive impact on Job involvement	
H1-3: Interactive justice has a significant positive impact on Job involvement	
H2: Perceived organizational justice has significant positive influence on Organizational identity	
H2-1: Distributive justice has a significant positive effect on Organizational identity	
H2-2: Procedural justice has a significant positive effect on Organizational identity	
H2-3: Interactive justice has a significant positive effect on Organizational identity	
H3: Organizational identity has a significant positive effect on Job involvement.	
H4: Organizational identity has a mediating effect on the relationship between Perceived organizational justice and Job involvement.	
H4-1: Organizational identification has a mediating effect on the relationship between	

Distributive justice and Job involvement.

H4-2: Organizational recognition has a mediating effect on the relationship between
Procedural justice and Job involvement.

H4-3: Organizational identification has a mediating effect on the relationship between
Interactive justice and Job involvement.

6 Enlightenments on the study

Through the research on the relationship among Organizational justice, Organizational identity and Job involvement, it can be seen that to fundamentally improve the Job involvement of nurses, it can be carried out from two aspects: improving the sense of Organizational justice and Organizational identity.

6.1 Starting from the sense of organizational justice three sub-dimensions, to strengthen organizational justice management

In the study, it is confirmed again that the Distributive justice dimension has the lowest score among the three, and has a great impact on Organizational identity and Job involvement. The continuous improvement of the current reward return distribution mechanism and relevant labor and personnel system has become the most important breaking method.

In terms of the Distribution justice, it is necessary to refine post management, introduce job descriptions, evaluate the ability, personality and preference of nurses, assign them to jobs requiring different characteristics, and develop reasonable person-post matching. To optimize the mechanism of performance appraisal and reward, the organization should combine with 360-degree performance appraisal, link work performance with income distribution, and ensure excellent performance and excellent remuneration as far as possible. For posts with high risks, tasks and special skills, the performance and reward should be tilted to a certain extent. Psychological comfort products, such as film coupons and other entertainment consumption, will be provided regularly. According to the nurse's condition, products that can relieve stress and help restore health, such as nutrition, massage, will be provided.

In terms of Procedural justice, individuals are allowed to participate in the discussion and decision on their own decisions to optimize the career development path planning of nurses, and some contracted nurses are allowed to convert to the establishment of labor relations by means of tests. At the same time, to provide a clearer and more reasonable promotion channel, attention should also be paid to the training of organizational culture and work skills for nurses, so as to improve their sense of identity with the organization, so that nurses can increase their Job involvement with a goal and form a positive cycle.

In terms of Interactive justice, leadership training for managers should be strengthened. In terms of personnel arrangement and work distribution management, individuals should be treated equally and the appeal

system and supervision mechanism should be established. If they are unfairly treated in work, they can timely respond, avoid negative behaviors of individuals, and ensure stable work quality of the personnel system.

6.2 Adjust the propaganda of organizational values and strengthen the sense of identity of individual organizations

The research shows that although the average score of Organizational identity is higher than Organizational justice, it is lower than Job involvement and has a greater influence on Job involvement. Therefore, after establishing a feasible system to improve the sense of Organizational justice, it is necessary to further optimize the current organizational culture training activities, investigate the organizational culture characteristics of hospitals and various departments, and use the characteristics of departments and hospitals to carry out cultural construction, so as to strengthen the cohesion and centripetal force of nurses. It pays attention to absorb the general opinions from nurses, and establishes the core value system recognized by both the individual and the organization, so that nurses have a sense of dependence and trust in the organization, and thus produce more work involvement. At the same time, the management must be clearly aware that the nature of organizational belonging of nurses is ultimately the interest identification. As the management side, only by fully considering the psychological needs of nurses, caring about their developing needs, and assisting them to solve the bottlenecks in their work, can the Organizational identity of nurses be further stimulated.

what is more, we should care about the life and work of nurses, cause the work of nurses requires high concentration, patience, carefulness and other characteristics. The hospital should try its best to meet the staff needs both in work and home, so as to reduce their long-term high stress and fatigue. For older nurses with general physical conditions, especially those with a 5-year working experience and a low sense of organizational justice, certain union funds and flexible working hours can be used to improve their sense of organizational justice, thus rekindles their strong sense of Organizational identity at the beginning of their employment. At the same time, the system of regular sympathy and visit can be established by referring to the elderly staff or nurses who have difficulties in work to have a sympathy meeting to exchange views and find out where they need help from the hospital.

In terms of individual career development needs, a clearer and more diversified career development path should be formulated to meet the development aspirations of medium and long term nurses. If medical managers want nurses to identify with the organization, they need to protect nurses' right to professional

development. Especially those undergraduate group received a good education, you can quickly adjust to adapt to the organization, but for a long time, too boring job content, failed to improve management practices and almost stagnant development space for a long time, also makes the nurse group appear misunderstand the organization and management, and then show the sabotage behavior in working, and even leave away. Therefore, special management should be given to those who are particularly attentive to their work and who have long maintained high standards of work, and attention should be paid to their cultivation and transfer; there should also be transparency in the allocation process for all nurses, flexibility in management interaction, and democratization of process discussion. In this respect, work affairs should be made public, and effective channels should be opened for nurses to understand and participate in work interaction.

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