

# The Mediating Effect of Social Capital on the Relationship Among Occupational Stress and Job Satisfaction of Nurses

Guanying Yang and Muhammad Shahid Khan  
Suan Sunandha Rajabhat University, Thailand  
Corresponding Author, E-mail: shahid.kh@ssru.ac.th

\*\*\*\*\*

## Abstract

**Background:** Global climate change, political instability and the COVID-19 pandemic are impeding public health progress and impacting global health development. As an indispensable part of the healthcare system, nurses are an important force to provide full-cycle health services for the people. High levels of occupational stress are associated with negative outcomes. Therefore, understanding the factors that can mitigate job stress and improve job satisfaction is essential. **Aims:** This study aims to investigate the relationships between occupational stress, social capital, and job satisfaction, with a particular focus on the mediating role of social capital. **Methodology:** A quantitative research approach was applied and a cross-sectional study research strategy was used to collect the data. Convenience sampling was applied and data were collected from nurses who were easily accessible and willing to participate in the research. A total of 624 questionnaires were collected from 6 hospitals and the data was analyzed using SPSS29.0 and SmartPLS 4.0. A structural equation model was employed to analyze the direct and indirect effects of occupational stress on job satisfaction, with social capital as a mediator. Path coefficients and significance levels were calculated to determine the strength and significance of these relationships. **Results:** Most of the respondent nurses who participated in the study were junior nurses, comprising 61.2% of the sample, whereas 30.4% were senior nurses, and 4.6% were associate professor nurses. Most respondents were married nurses (80%) and single nurses were 17.9%. Almost 97.8% of nurses had completed their BSc nursing, and between the ages of 20–54. Occupational stress negatively impacts social capital ( $\beta = -0.515$ ,  $p = 0.000$ ). Social capital positively influences job satisfaction ( $\beta = 0.719$ ,  $p = 0.000$ ). Occupational stress has a direct negative effect on job satisfaction ( $\beta = -0.435$ ,  $p = 0.000$ ). Occupational stress indirectly affects job satisfaction through social capital, with an indirect effect of  $-0.260$  ( $p = 0.000$ ). **Conclusion:** This study demonstrates that occupational stress has a significant negative impact on both social capital and job satisfaction. Social capital has a positive impact on job satisfaction. Meanwhile, occupational stress indirectly affects job satisfaction through social capital, highlighting the mediating role of social capital. These findings suggest that reducing occupational stress and enhancing social capital are crucial for improving employee job satisfaction.

**Keywords:** Occupational Stress; Social Capital; Job Satisfaction; Structural Equation Modeling; Mediation Effect.

## Introduction

In 2015, the United Nations proposed the Sustainable Development Goals (SDGs), many of which are closely related to human health (United Nations, 2023). However, global climate change, political instability, and the COVID-19 pandemic have hindered public health progress, exacerbating some problems and reversing progress in others. The pandemic has worsened global mental health issues, with the virus and its economic impacts acting as stressors. In 2020 alone, depression and anxiety cases increased by 246 million and 374 million, respectively, a 28% and 26% rise (COVID-19 Mental Disorders Collaborators, 2021). Healthcare workers face increased risks of mental disorders, with a study in China finding that 46.04% and 44.37% of 2,285 medical workers experienced anxiety and depression (Que et al., 2020:e100259). Nurses, as key members of the medical team, play a crucial role in patient care, often facing high levels of job stress due to the demanding nature of their work. According to the data of the National Bureau of Statistics of China (National Bureau of Statistics, 2021), by the end of 2021, the total number of registered nurses in China will reach 5.02 million, accounting for about 44.7% of the total number of health technicians. As an indispensable part of the healthcare system, nurses are an important force to provide all-round and full-cycle health services for the people (Xiang et al., 2021:887). Job stress among nurses can stem from factors such as long working hours, high patient acuity, emotional demands, and workplace violence (Kim et al., 2020:22). High levels of job stress are associated with negative outcomes like burnout, decreased job performance, and high turnover rates. Therefore, understanding the factors that can mitigate job stress and improve job satisfaction is essential.

Previous research has extensively explored the determinants of job stress and job satisfaction among nurses. Factors like work environment, leadership support, and professional development opportunities significantly influence job satisfaction (Zhang et al., 2021). However, less attention has been paid to the role of social capital in this context. Social capital, defined as the networks, norms, and trust that facilitate coordination and cooperation for mutual benefit, has emerged as a potential mediator in the relationship between job stress and job satisfaction (Chen et al., 2021:182).

As an indispensable part of the healthcare system, nurses are an important force to provide all-round and full-cycle health services for the people (Xiang et al., 2021:887). However, its work is characterized by high mental tension, heavy workload, emotional labor, high risk, irregular work and rest (Wang et al., 2020:e19172), and prominent health problems. This study is to investigate the mediating role of social capital in the relationship between job stress and job satisfaction among nurses. By understanding this mediation mechanism, we aim to provide insights into how healthcare organizations can foster a supportive work environment that enhances nurse well-being and job satisfaction.

## Research Objectives

Based on the above situation, this study is expected to understand the occupational stress and social aspects affecting the job satisfaction of Chinese nurses, including how occupational stress impact the job satisfaction, and how social capital influence the job satisfaction. The specific objectives of the study is as follows:

(1) To explore the direct effects of occupational stress on job satisfaction, social capital on job satisfaction and occupational stress on social capital.

(2) To analyze the mediating effect of social capital on the relationship between Occupational stress and job satisfaction among nurses.

## Literature Review

Numerous studies have demonstrated a significant negative impact of occupational stress on job satisfaction. High levels of job stress lead to emotional exhaustion and burnout, which consequently diminish job satisfaction (Bakker & Demerouti, 2017:273). Specifically, excessive workload and role conflict can make employees feel overwhelmed and under-resourced, making it challenging to complete tasks effectively, thereby reducing job satisfaction (Karatepe & Olugbade, 2016:374). Moreover, job insecurity and perceived injustice in the workplace also contribute to higher levels of stress, further lowering job satisfaction (Green et al., 2020:1).

Job satisfaction among nurses is influenced by both intrinsic factors, such as personal achievement and professional growth, and extrinsic factors, such as working conditions and salary (Lu et al., 2019). Higher job satisfaction is associated with better job performance, lower turnover rates, and improved patient care outcomes (Zhang et al., 2020:85). Understanding the factors that enhance job satisfaction is crucial for healthcare organizations aiming to improve nurse retention and patient care quality.

In recent years, the relationship between occupational stress and job satisfaction has garnered significant attention in research. Occupational stress refers to the tension and strain individuals experience in the workplace due to various stressors such as workload, role conflict, and job insecurity (Schaufeli et al., 2020:11). Job satisfaction, on the other hand, is the overall evaluation of one's job and work environment, and it is a crucial indicator of workplace well-being and life quality (Zhou & Long, 2021:800).

Social capital, which encompasses the quality of relationships and networks among employees, has a significant impact on job satisfaction. Higher levels of trust, reciprocity, and support within an organization contribute to a more satisfying work environment (Lee & Kim, 2019:591). Employees with strong social networks are more likely to report higher job satisfaction due to better communication, collaboration, and a sense of belonging (Gittell, Seidner, & Wimbush, 2010:490). Supportive social networks help employees manage stress and work-related challenges, further enhancing job satisfaction (Yang & Mossholder, 2010:50). A positive organizational culture, characterized by mutual respect and cooperation, reduces conflicts and promotes harmony, which are conducive to job satisfaction (Helliwell & Putnam, 2004:1435). Organizations with high social capital tend to have lower turnover rates and higher employee retention (Cropanzano & Mitchell, 2005:874). Recent studies suggest that social capital can buffer the negative effects of job stress by providing support networks and resources that help nurses cope with stressors (Zhang et al., 2021). Strong interpersonal relationships with colleagues can offer emotional support and practical assistance, reducing the

perceived burden of job stress and enhancing job satisfaction. Despite these promising findings, the mediating role of social capital in the relationship between job stress and job satisfaction among nurses remains underexplored.

## **Research Methodology**

### **Research Measures**

**Social Capital** Collecting Data using the Social Capital Scale (SCQ) (Yang S, et al., 2010:50) which has 16 items. The answer to each item was the score of the item, and the total score of social capital was the sum of the 16 items, so the total score of social capital ranged from 16 to 80. A higher score represents a higher level of social capital. When evaluating the reliability and validity of the social capital scale and analyzing the mediating effect of social capital, we used the item score. When assessing the association among the measured variables by using multiple linear regression analyses, we used the scale score.

**Job Satisfaction** Job satisfaction was measured using the Short Minnesota Satisfaction Scale (MSQ), which typically assesses three main dimensions of job satisfaction: intrinsic satisfaction, extrinsic satisfaction, and overall satisfaction (Weiss, D. J, 1967). There are 20 items in the questionnaire, and the score ranges from 20 to 100, with higher scores indicating higher job satisfaction.

**Occupational Stress Measurement** of occupational stress, Occupational stress was measured by the ERI Questionnaire (Guan et al., 2017:872). The ERI Questionnaire was originally designed by Siegrist in 1996, and was translated to Chinese by Li et al.<sup>32,33</sup> The ERI Questionnaire has been used widely by researchers and has demonstrated adequate reliability and validity among sampled populations in China.<sup>33,34</sup> The 23-item ERI Questionnaire measures extrinsic effort (six items), reward (eleven items), and overcommitment (six items). It uses a 5-point Likert scale for extrinsic effort and reward (1=no stressful experiences to 5=very distressed) and a 4-point Likert scale for overcommitment (1=strongly disagree to 4=strongly agree). Effort:reward ratio was calculated by dividing effort by reward and multiplied by 11/6 to correct for the item-number difference in the two dimensions. An effort:reward ratio >1 means high cost and low gain, reflecting a risk-imbalance condition. A higher effort:reward ratio and overcommitment indicate higher occupational stress.

### **Research Scope**

#### **Target population**

This study analyzed the population of nurses working in public sector hospitals in Dali. All these nurses have been registered by Dali Health Commission.

#### **Study sample**

The study surveyed nurses in six public hospitals to measure the occupational stress, job satisfaction and its related influencing factors. Convenience sampling was applied and data were collected from respondents who were easily accessible and willing to participate in the research.

#### **Research Procedure**

For conducting this research study, formal permission was granted by the administration of all six public hospitals. The questionnaire was distributed through the online platform, and all nurses participating in the survey were informed and consented. The researchers guaranteed the respondents about data confidentiality for honest answers. A total

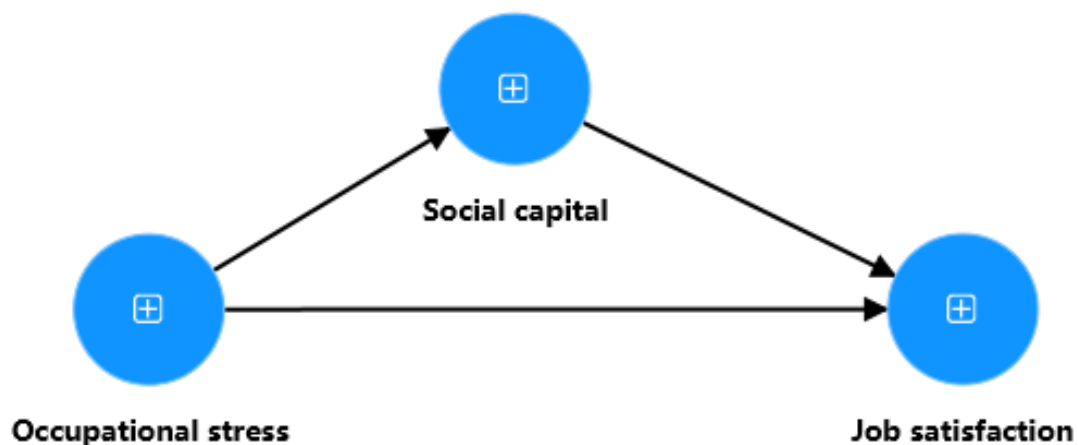
of 710 questionnaires were collected on the network platform, of which 86 were incomplete and not included in the study, and a total of 624 questionnaires were included in the study.

#### Research ethics statement

Our study is part of the Ph.D. dissertation of one researcher and it was approved by the Advanced Studies & Research Board of the respective Institution. It was related to the job satisfaction of nurses and did not include data collection from patients for medical research. This study was conducted with formal permission from all hospitals and nursing administration. The questionnaires were distributed after obtaining verbal consent. This study reports the respondents' perceptions, and there is no direct involvement of human objects in the experimentation.

### Research Conceptual Framework

A quantitative research design was applied, and questionnaire-based survey research was conducted. This is a cross-sectional study. For the target population, 6 hospitals from Dali, Yunnan Province, China and a convenience sampling technique was used for data collection. Fig 1 is the conceptual framework.



**Figure1** Research Conceptual Framework

### Research Results

#### Descriptive statistics

Table 1 shows that most of the respondent nurses who participated in the study were junior nurses, comprising 61.2% of the sample, whereas 30.4% were senior nurses, and 4.6% were associate professor nurses. Most respondents were married nurses (80%) and single nurses were 17.9%. Almost 97.8% of nurses had completed their BSc nursing, and between the ages of 20–54. Overall, there was a good mix of samples to depict a clear picture of the population.

**Table1** Demographics.

Characteristics	Frequency	Percent (%)
<b>Gender</b>		
female	610	97.8
male	14	2.2
<b>Age</b>		
20~	196	31.4
30~	313	50.2
40~	101	16.2
50~	14	2.2
<b>Education</b>		
Technical Secondary	14	2.2
College degree	128	20.5
Bachelor	480	76.9
Master	2	.3
<b>Working years</b>		
Less than five years	96	15.4
5-10years	212	34.0
more than ten years	316	50.6
<b>Professional Title</b>		
Junior	382	61.2
Senior	190	30.4
Associate Professor	29	4.6
Professor	4	.6
No title	19	3.0
<b>Unit</b>		
The First Affiliated Hospital of Dali University	152	24.4
Dali People's Hospital	128	20.5
Dali first People's Hospital	101	16.2
Dali Traditional Chinese Medicine Hospital	102	16.3
Dali Maternal and Child Health Care Hospital	102	16.3
Community primary health organizations of Dali	39	6.3
<b>Monthly Income</b>		
<3000yuan	118	18.9
3000-5000yuan	323	51.8
5000-10000yuan	173	27.7
>10000yuan	10	1.6
<b>Marital Status</b>		
Married	499	80.0
Single	112	17.9

<b>Divorced</b>	<b>11</b>	<b>1.8</b>
<b>Widowed</b>	<b>2</b>	<b>.3</b>

### Correlations

To measure concurrent validity, correlation coefficients were measured for all study variables. It measures the strength of the relationship between the two variables. We measured the Pearson correlation coefficient values for all variables (Table 2).

**Table 2** Posterior Distribution Characterization for Pairwise Correlationsa

<b>Variables</b>			<b>Occupational stress</b>	<b>Job satisfaction</b>
<b>Occupational stress</b>	<b>Posterior</b>	<b>Mode</b>		<b>-.498</b>
		<b>Mean</b>		<b>-.497</b>
		<b>Variance</b>		<b>.001</b>
	<b>95% Credible Interval</b>	<b>Lower Bound</b>		<b>-.555</b>
		<b>Upper Bound</b>		<b>-.438</b>
	<b>N</b>		<b>624</b>	
<b>Job satisfaction</b>	<b>Posterior</b>	<b>Mode</b>	<b>-.498</b>	
		<b>Mean</b>	<b>-.497</b>	
		<b>Variance</b>	<b>.001</b>	
	<b>95% Credible Interval</b>	<b>Lower Bound</b>	<b>-.555</b>	
		<b>Upper Bound</b>	<b>-.438</b>	
	<b>N</b>		<b>624</b>	<b>624</b>
<b>social capital</b>	<b>Posterior</b>	<b>Mode</b>	<b>-.378</b>	<b>.701</b>
		<b>Mean</b>	<b>-.377</b>	<b>.700</b>
		<b>Variance</b>	<b>.001</b>	<b>.000</b>
	<b>95% Credible Interval</b>	<b>Lower Bound</b>	<b>-.444</b>	<b>.660</b>
		<b>Upper Bound</b>	<b>-.310</b>	<b>.739</b>
	<b>N</b>		<b>624</b>	<b>624</b>

### Reliability and validity

A reflective measurement model was used to evaluate data reliability and validity. We measured the reliability using cronbach's alpha and composite reliability. Convergent validity was measured using the Average Variance Extracted (Table3).

**Table3** Construct reliability and validity.

Construct	Cronbach's alpha	Composite reliability (CR)	Average variance extracted (AVE)	Discriminant Validity (Fornell-Larcker Criterion)		
				Job satisfaction	Occupational stress	Social capital
Job satisfaction	0.949	0.955	0.518			
Occupational stress	0.735	0.802	0.345	0.721		
Social capital	0.932	0.940	0.502	0.741	0.551	

**Internal consistency.** To assess the instrument's reliability, we measured its internal consistency using cronbach's alpha and composite reliability (Table 3). Cronbach's alpha values ranged between 0.735–0.949 for all the latent variables. Data is collected by questionnaire rather than scale Cronbach's alpha value greater than 0.70 shows high internal consistency. The composite reliability (CR) ranged between 0.735 and 0.949 for all the latest variables whereas recommended value of composite reliability is above 0.70.

**Convergent validity.** Convergent validity measures construct validity. This shows that two or more items/constructs share variances in common that are assumed to be theoretically related. The average variance extracted (AVE) was calculated to measure the convergent validity (Table 3). All latent variables ranging between 0.345–0.518. The findings showed that convergent validity was high for all latent variables.

**Discriminant validity.** The differences between all latent variables were determined using discriminant validity. In any construct, the uniqueness of the manifest variable, in contrast to other variables in the model, was measured through discriminant validity. We applied the Fornell- Larcker criterion to measure discriminant validity. We measured discriminant validity by comparing the square root of average variance extracted (AVE) values with the correlation coefficient values among latent variables. The square root of the AVE values was greater than the correlation coefficients among the latent variables (Table 3).

#### **Structural model and path coefficients**

Direct relationships were measured in the first stage and mediation analysis was performed at the second level. In direct relationships, the impact of Occupational stress on Social capital and the impact of Social capital on Job satisfaction were measured. In the mediation analysis, the mediating role of Social capital in the relationship between Occupational stress with Job satisfaction was examined. All direct and indirect relationships were significant ( $p < 0.05$ ).

**Evaluation of collinearity.** Collinearity was checked before testing the hypotheses. The structural model evaluates the significant level of collinearity between the explanatory and predictor variables. For all items, the variance inflation factor (VIF) was calculated to separately check the collinearity of each item.



**Path coefficients of structural model.** The significance of the association between independent and dependent variables was established by testing the hypotheses.  $\beta$  values were determined for each potential relationship in the proposed model. Larger values of  $\beta$  indicate a greater effect of the independent variables on the dependent variables. Table 4 displays the test results using the T-statistics and  $\beta$  values to corroborate the significance levels found throughout the analysis. The study found a significant positive association between Social capital and Job satisfaction through direct path analyses ( $\beta=0.719$ ,  $p<0.000$ ). The study found a significant negative association between Occupational stress and Job satisfaction ( $\beta=-0.435$ ,  $p<0.000$ ), Occupational stress and Social capital ( $\beta=-0.515$ ,  $p<0.000$ ). In terms of mediating effects, we observed that Social capital mediated the relationship between Occupational stress and Job satisfaction ( $\beta=10.26$ ,  $p<0.000$ ) and the negative effect of occupational stress on job satisfaction was significantly reduced. The mediating effect was found to be significant by bootstrapping. Fig 2 shows the path coefficients.

**Table 4** Path coefficients.

Structural Path	B	P-value
Occupational stress -> Social capital	-0.515	0.000
Social capital -> Job satisfaction	0.719	0.000
Occupational stress -> Job satisfaction	-0.435	0.000
Occupational stress -> Social capital -> Job satisfaction	- 0.260	0.000

**R<sup>2</sup> and F<sup>2</sup> effect size.** The coefficient of determination (R<sup>2</sup>) was used to measure the overall effect size and variance explained by the dependent variable. Therefore, the coefficient of determination R<sup>2</sup> measures the predictive accuracy of a model. We calculated R<sup>2</sup> values for the dependent variables. According to the criteria provided by Hair J (Hair J, 2013), the R<sup>2</sup> values for Job satisfaction (0.518) and Social capital (0.284) were considered moderate. The variability in the R<sup>2</sup> value when a construct is excluded or included from the model is determined by the F<sup>2</sup> effect size. The F<sup>2</sup> effect size describes the significant impact of the independent variable on the dependent variable when it is excluded from the model. The values of the F<sup>2</sup> effect size were calculated for all independent variables. The findings showed a strong impact of Occupational stress (F<sup>2</sup> = 0.290) on dependent variables.

**Evaluation of predictive relevance Q<sup>2</sup>.** The prediction error was assessed using Q<sup>2</sup> values, with a Q<sup>2</sup> value above zero indicating the model's predictive relevance with specific variables. For Job satisfaction and Social capital, the Q<sup>2</sup> values were measured as (Q<sup>2</sup> = 0.479) and (Q<sup>2</sup> = 0.280) respectively. These values indicate a high predictive relevance for the selected dependent variables owing to the independent variables.

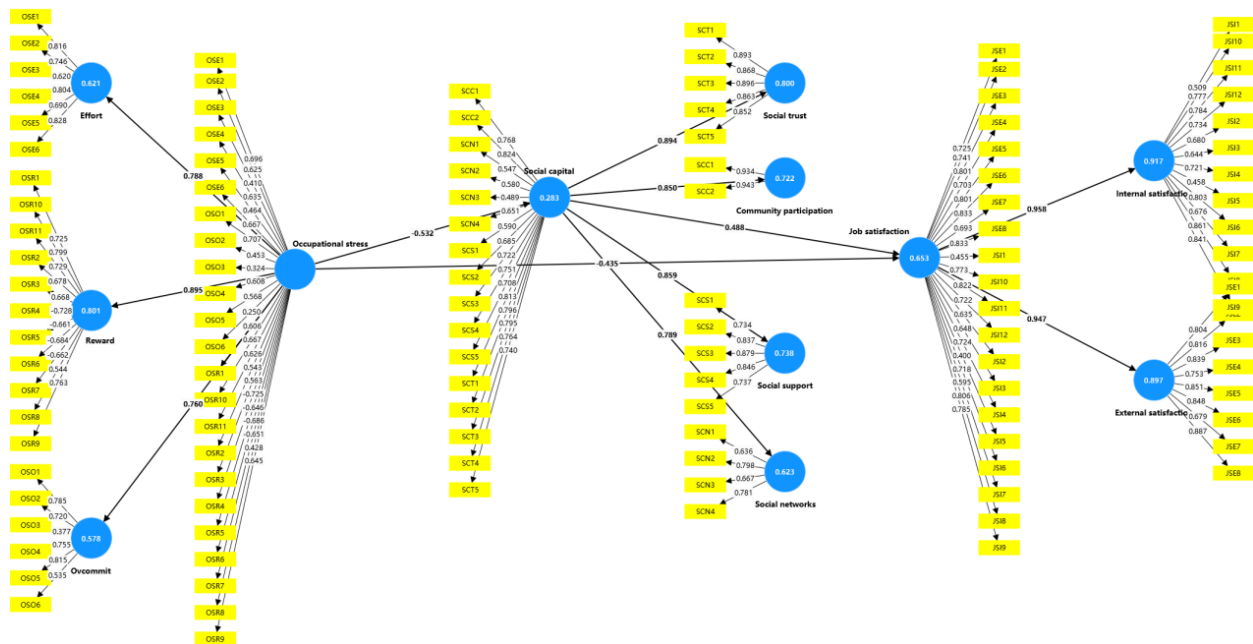


Fig.2 Path coefficients.

## Discussion

This study utilized structural equation modeling (SEM) to analyze the relationships between occupational stress, social capital, and job satisfaction. The results indicate that occupational stress has a significant negative impact on both social capital and job satisfaction, while social capital positively influences job satisfaction. Furthermore, occupational stress affects job satisfaction indirectly through social capital, demonstrating a mediation effect. These findings provide important insights into the complex mechanisms through which occupational stress impacts employee job satisfaction.

### The direct effects of occupational stress on job satisfaction, social capital on job satisfaction and occupational stress on social capital.

Firstly, the direct negative effect of occupational stress on social capital is indicated by a path coefficient of -0.515, with a significant p-value of 0.000. This result suggests that higher levels of occupational stress significantly reduce an individual's social capital. This finding is consistent with existing literature, which suggests that high-stress work environments can negatively affect employees' interpersonal interactions and support networks (Zhang et al., 2020:85; Liu & Wang, 2019:238). Social capital, as a reflection of trust, mutual aid, and cooperation among employees, is crucial for resource acquisition and support systems. A decrease in social capital can lead to increased job burnout and turnover intentions (Chen et al., 2022:55).

Secondly, the positive direct effect of social capital on job satisfaction is evidenced by a path coefficient of 0.719, with a significant p-value of 0.000. This indicates that an increase in social capital contributes to higher job satisfaction. Social capital, as a positive social resource, enhances employees' sense of belonging, work support, and psychological safety, which effectively boosts job satisfaction (Wang et al., 2021:99). This finding aligns with recent

studies suggesting that high levels of social capital enhance employee motivation and job satisfaction (Kim & Kang, 2017:22).

Additionally, the direct negative effect of occupational stress on job satisfaction is demonstrated by a path coefficient of -0.435, with a significant p-value of 0.000. Higher levels of occupational stress significantly reduce job satisfaction, a conclusion that corroborates the negative correlation between occupational stress and job satisfaction found in previous research (Jung & Yoon, 2019:29). Increased occupational stress adds psychological burden on employees, reducing work motivation and enjoyment, thereby leading to lower job satisfaction (Huang et al., 2021:2485).

### **The mediating effect of social capital on the relationship between Occupational stress and job satisfaction among nurses.**

The indirect effect of occupational stress on job satisfaction through social capital is -0.260, with a significant p-value of 0.000. This result confirms the mediating role of social capital between occupational stress and job satisfaction. In other words, occupational stress affects job satisfaction not only directly but also indirectly by reducing social capital. This finding underscores the importance of social capital in mitigating the negative effects of occupational stress (Lee et al., 2020:823). Effective social support and interpersonal relationships can alleviate the negative impacts of occupational stress on employees' psychology and work attitudes, thus enhancing job satisfaction (Park & Jang, 2022:621). This study provides data support for this view.

## **Conclusion**

This study demonstrates that occupational stress has a significant negative impact on both social capital and job satisfaction. Social capital, in turn, positively influences job satisfaction. Additionally, occupational stress indirectly affects job satisfaction through social capital, highlighting the mediating role of social capital. These findings suggest that reducing occupational stress and enhancing social capital are crucial for improving employee job satisfaction. Organizations should prioritize stress management and foster a supportive work environment to achieve better employee outcomes.

## **Suggestion**

The findings support the integration of occupational stress theories with social capital and job satisfaction models. Stress reduction strategies should consider social capital as a mediating factor that can mitigate negative outcomes on job satisfaction. The significant mediating role of social capital underscores its importance as a buffer against the adverse effects of occupational stress. This aligns with social capital theory, suggesting that robust social networks and support systems can enhance individual resilience in the workplace. The direct and indirect paths indicate that addressing occupational stress holistically requires both reducing stressors and fostering social capital. Theoretical models should therefore incorporate both individual and organizational interventions to enhance job satisfaction.

### **1. Interventions to Reduce Occupational Stress**

The negative path coefficient (-0.515) between occupational stress and social capital suggests that high levels of occupational stress significantly reduce social capital among nurses. Healthcare organizations should implement stress-reduction interventions such as stress

management training, adequate staffing levels, and promoting a healthy work-life balance to mitigate the adverse effects of occupational stress. These measures can help maintain or even enhance social capital in the workplace.

## 2. Enhancing Social Capital

The positive path coefficient (0.719) between social capital and job satisfaction indicates that higher social capital leads to greater job satisfaction. To capitalize on this relationship, healthcare institutions should foster a supportive and collaborative work environment. This can be achieved through team-building activities, regular staff meetings to facilitate communication, and establishing mentorship programs that encourage strong interpersonal relationships among nursing staff.

## 3. Addressing Direct Effects of Occupational Stress

The direct negative impact of occupational stress on job satisfaction (-0.435) underscores the importance of directly addressing stressors in the nursing profession. Implementing comprehensive wellness programs, providing access to counseling services, and ensuring fair and manageable workloads are essential steps. Additionally, creating an open culture where nurses feel comfortable discussing their stressors can help in early identification and intervention.

## 4. Leveraging Social Capital to Mitigate Stress Effects

The mediation effect of social capital in the relationship between occupational stress and job satisfaction (-0.260) suggests that social capital can buffer some of the negative impacts of stress on job satisfaction. Healthcare organizations should thus not only focus on reducing stress but also actively work on building social capital. Encouraging peer support networks, promoting shared governance models, and recognizing and rewarding collaborative efforts can strengthen social capital.

## Further Research

### 1. Longitudinal Studies

Future research should consider longitudinal designs to explore how the relationships between occupational stress, social capital, and job satisfaction evolve over time. Understanding the long-term effects of interventions aimed at reducing stress and enhancing social capital can provide deeper insights into sustainable strategies for improving nurse well-being.

### 2. Diverse Healthcare Settings

Examining these relationships across various healthcare settings, such as urban versus rural hospitals or public versus private institutions, can help determine if the findings are universally applicable or if specific contexts require tailored approaches.

### 3. Moderating Variables

Investigating potential moderating variables such as organizational culture, leadership styles, and individual resilience could offer a more nuanced understanding of how occupational stress and social capital interact to influence job satisfaction. Identifying these moderators can help in designing more targeted interventions.

### 4. Qualitative Approaches:

Complementing quantitative findings with qualitative research can provide richer insights into the lived experiences of nurses. In-depth interviews and focus groups can uncover specific stressors, sources of social capital, and factors contributing to job satisfaction, offering a more comprehensive understanding of these dynamics.

### 5. Comparative Studies

Comparative studies between different countries or regions can shed light on how cultural, economic, and policy differences influence the relationships among occupational stress, social capital, and job satisfaction. This can guide international best practices and inform global health policy.

## References

- COVID-19Mental Disorders Collaborators. (2021). *Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19pandemic. Lancet.* 398 (10312), 1700-1712.
- National Bureau of Statistics. (2021). Statistical Bulletin of the People's Republic of China on National Economic and Social Development in 2021. *Online*. Retrieved November 10, 2023.from [http://www.stats.gov.cn/tjsj/zxfb/202202/t20220228\\_1827960.html](http://www.stats.gov.cn/tjsj/zxfb/202202/t20220228_1827960.html).
- Que JY, Shi L, Deng JH, et al. (2020). Psychological impact of the COVID-19 pandemic on healthcare workers: across-sectional study in China. *Gen Psychiatr.* 14, 33 (3):e100259.
- Wang L, Wang XR, Liu S, et al. (2020). Analysis and strategy research on quality of nursing work life. *Medicine(Baltimore).* 99 (6):e19172.
- Weiss, D. J., Dawis, R. V., & England, G. W. (1967). *Manual for the Minnesota satisfaction questionnaire*. Minnesota studies in vocational rehabilitation.
- Xiang Y, Liu JL, Liu X, et al. (2021). Analysis of nurses work status and differences between secondary and tertiary hospitals in Guangdong Province. *Chin J Nurs.* 56 (6), 887-893.
- Guan S, Xiaerfuding X, Ning L, et al. (2017). Effect of job strain on job burnout, mental fatigue and chronic diseases among civil servants in the Xinjiang Uygur autonomous region of China. *Int J Environ Res Public Health.* 14, 872.
- Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology.* 22 (3), 273-285.
- Chen, C. C., Liu, S., & Zhang, Y. (2021). Stress and well-being: A systematic review and meta-analysis. *Journal of Occupational Health.* 63 (3), 184-195.
- Green, F., Felstead, A., Gallie, D., & Henseke, G. (2020). Work intensity in Britain: First findings from the Skills and Employment Survey 2017. *Industrial Relations Journal.* 51 (3), 1-18.
- Karatepe, O. M., & Olugbade, O. A. (2016). The effects of job demands, role conflict, and emotional exhaustion on turnover intentions. *International Journal of Contemporary Hospitality Management.* 28 (4), 374-396.
- Schaufeli, W. B., Taris, T. W., & Van Rhenen, W. (2020). Workaholism, burnout, and work engagement: Three of a kind or three different kinds of employee well-being?. *Applied Psychology.* 69 (1), 11-38.
- Zhou, H., & Long, L. (2021). Job satisfaction and job performance: A meta-analysis of the mediating effects of work engagement. *Journal of Applied Psychology.* 106 (6), 800-816.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management.* 31 (6), 874-900.
- Gittell, J. H., Seidner, R., & Wimbush, J. (2010). A relational model of how high-performance work systems work. *Organization Science.* 21 (2), 490-506.

- Helliwell, J. F., & Putnam, R. D. (2004). The social context of well-being. *Philosophical Transactions of the Royal Society B: Biological Sciences*. 359 (1449), 1435-1446.
- Lee, H., & Kim, M. (2019). Social capital and job satisfaction: A multilevel analysis of South Korean data. *Social Indicators Research*. 141 (2), 591-608.
- Yang, J., & Mossholder, K. W. (2010). Examining the effects of trust in leaders: A bases-and-foci approach. *The Leadership Quarterly*. 21 (1), 50-63.
- Zhang, Y., Liu, X., Wang, M., & Sun, J. (2020). The effect of occupational stress on job satisfaction: A mediated moderation model. *Journal of Occupational Health Psychology*. 25 (2), 85-94.
- Liu, W., & Wang, Y. (2019). The impact of social capital on job satisfaction among Chinese employees: The mediating role of organizational trust. *Asian Business & Management*. 18 (3), 238-258.
- Chen, J., Ma, Y., & Wu, X. (2022). Exploring the role of social capital in employee well-being: A multilevel analysis. *Social Indicators Research*. 159 (1), 55-76.
- Wang, P., Sun, L., & Zhang, X. (2021). The impact of social capital on employee performance and job satisfaction: The moderating role of perceived organizational support. *Management Review Quarterly*. 71 (1), 99-120.
- Kim, S., & Kang, H. (2017). Social capital and job satisfaction: The case of South Korea. *Journal of Organizational Behavior*. 38 (1), 22-39.
- Jung, H., & Yoon, J. (2019). The effects of occupational stress on job satisfaction and organizational commitment: The mediating role of social support. *Journal of Occupational Health Psychology*. 24 (1), 29-40.
- Huang, H., Liu, J., & Wang, L. (2021). The effect of occupational stress on job satisfaction and work performance: The role of social support. *International Journal of Environmental Research and Public Health*. 18 (5), 2485.
- Lee, J., Park, S., & Yoo, M. (2020). The influence of social capital on job satisfaction and turnover intention in the healthcare sector. *Journal of Nursing Management*. 28 (4), 823-830.
- Park, K., & Jang, S. (2022). The impact of social capital on job satisfaction and well-being: The mediating role of psychological capital. *Journal of Happiness Studies*. 23 (2), 621-641.