



Factors Predicting Organizational Trust of Nurses in University Hospitals,
Chengdu City, Sichuan Province, the People’s Republic of China*
ปัจจัยทำนายความไว้วางใจในองค์กรของพยาบาลในโรงพยาบาลมหาวิทยาลัย
เมืองเฉิงตู มณฑลเสฉวน สาธารณรัฐประชาชนจีน*

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Abstract

Organizational trust can enhance organizational performance, organizational commitment, and intention to stay among nurses. This descriptive predictive study aimed to explore the organizational trust of nurses and to determine the predictability of age, work experience, perceived organizational support, and structural empowerment on organizational trust. The participants included 166 nurses, randomly selected from three university hospitals in Chengdu City, Sichuan Province, the People’s Republic of China. The research instruments included 1) a demographic data form, 2) the Chinese Version of the Survey of Nurse Perceived Organizational Support (SNPOS), 3) the Chinese version of the Conditions of Work Effectiveness Questionnaire II (CWEQ- II), and 4) the Organizational Trust Index (OTI). The reliability values of the SNPOS, CWEQ- II, and OTI, as tested by Cronbach’s alpha coefficient, were 0.97, 0.96, and 0.98, respectively. In addition, the Cronbach’s alpha coefficients of the Organizational Trust Index dimensions were 0.90, 0.90, 0.90, 0.89, and 0.90. The data were analyzed by descriptive statistics and stepwise multiple regression.

The results revealed that:

1. Nurses perceived a high level of overall organizational trust (M = 107.60, SD = 28.94). The dimensions of competence (M = 15.30, SD = 3.78) and identification (M = 19.16, SD = 4.88) were at high levels, and the dimensions of openness and honesty (M = 32.84, SD = 7.65), concern for employees (M = 25.3, SD = 7.65), and reliability (M = 14.95, SD = 4.01) were at moderate levels.

2. Perceived organizational support and structural empowerment could predict 66.6% of the variability of organizational trust ($R^2 = .666$, Adjusted $R^2 = .662$, $F = 162.408$, $p = .001$).

Nursing administrators can use the results of these predicting factors as evidence for developing strategies to enhance nurses’ organizational trust in university hospitals in China.

Keywords: Predicting factors; Organizational trust; Nurses; University hospitals

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บทคัดย่อ

ความไว้วางใจในองค์กร สามารถเพิ่มประสิทธิภาพการทำงานขององค์กร ความยืดหยุ่นผูกพันต่อองค์กร และความตั้งใจที่จะคงอยู่ในงานของพยาบาล การศึกษาแบบพรรณนาเชิงทำนายนี้ มีวัตถุประสงค์เพื่อสำรวจความไว้วางใจในองค์กรของพยาบาล และเพื่อศึกษาความสามารถในการทำนายความไว้วางใจในองค์กรของอายุ ประสบการณ์การทำงาน การรับรู้การสนับสนุนขององค์กร และการสร้างเสริมพลังอำนาจเชิงโครงสร้างกลุ่มตัวอย่างประกอบด้วยพยาบาล 166 คน สุ่มเลือกจากโรงพยาบาลมหาวิทยาลัยสามแห่งในเมืองเฉิงตู มณฑลเสฉวน สาธารณรัฐประชาชนจีน เครื่องมือวิจัย ได้แก่ 1) แบบบันทึกข้อมูลทั่วไป 2) แบบสำรวจการสนับสนุนองค์กรตามการรับรู้ของพยาบาล (SNPOS) ฉบับภาษาจีน 3) แบบสอบถามเงื่อนไขประสิทธิผลของงาน II (CWSEQ- II) ฉบับภาษาจีน และ 4) ดัชนีความไว้วางใจในองค์กร (OTI) ทดสอบความเชื่อมั่นของเครื่องมือ SNPOS, CWSEQ- II และ OTI โดยหาค่า Cronbach's alpha coefficient ได้เท่ากับ 0.97, 0.96 และ 0.98 ตามลำดับ และค่า Cronbach's alpha coefficient ของดัชนีความไว้วางใจในองค์กรในแต่ละมิติ เท่ากับ 0.90, 0.90, 0.90, 0.89, และ 0.90 วิเคราะห์ข้อมูลโดยใช้สถิติเชิงพรรณนา และสถิติ stepwise multiple regression

ผลการวิจัยพบว่า

1. พยาบาลรับรู้ความไว้วางใจในองค์กรโดยรวมในระดับสูง ($M = 107.60$, $SD = 28.94$) มิติของความสามารถ ($M = 15.30$, $SD = 3.78$) และการระบุด่วน ($M = 19.16$, $SD = 4.88$) อยู่ในระดับสูง และมีมิติของการเปิดกว้างและความซื่อสัตย์ ($M = 32.84$, $SD = 7.65$) ความห่วงใยต่อพนักงาน ($M = 25.3$, $SD = 7.65$) และความน่าเชื่อถือ ($M = 14.95$, $SD = 4.01$) อยู่ในระดับปานกลาง

2. การรับรู้การสนับสนุนขององค์กรและการสร้างเสริมพลังอำนาจเชิงโครงสร้างสามารถทำนายความแปรปรวนของความไว้วางใจในองค์กรได้ร้อยละ 66.6 ($R^2 = .666$, Adjusted $R^2 = .662$, $F = 162.408$, $p = .001$)

ผู้บริหารการพยาบาล สามารถใช้ผลการศึกษาของปัจจัยทำนายเพื่อเป็นหลักฐานเชิงประจักษ์สำหรับการพัฒนากลยุทธ์เพื่อเพิ่มความไว้วางใจในองค์กรของพยาบาล ในโรงพยาบาลมหาวิทยาลัยในประเทศจีน

คำสำคัญ: ปัจจัยทำนาย ความไว้วางใจในองค์กร พยาบาล โรงพยาบาลมหาวิทยาลัย

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Background and significance

The nursing shortage has become a critical problem in the healthcare industry at both local and international levels. By the year 2030, the world will face a nurse shortage of 5.7 million, mainly in South-East Asia, Asia, Africa, and the Eastern Mediterranean (The World Bank, 2020). The Chinese Nursing Association reported that there were 4.5 million registered nurses in 2019, with 3.14 nurses per thousand people, far below the average for developed countries, such as the United States (11.7), Japan (11.76), or Germany (13.95) (Michas, 2021). Thus, it is necessary to develop strategies to retain nurses in organizations. Empirical research suggested that building a trustworthy relationship can positively affect employees' performance, commitment, and intention to stay (Al-Hamed, 2018; Elewa & El Banan, 2019).

Organizational trust (OT) refers to the positive expectations that nurses have about the intentions and actions of networks of others based on roles, relationships, experiences, and interdependencies (Shockley-Zalabak et al., 2000). Organizational trust plays a vital part in organization development, nurse behavior, and nursing quality (Akgerman & Sönmez, 2020; Williams, 2005). Increasing employees' organizational trust leads to employees taking responsibility for an organization's development and voluntarily helping the organization to achieve its goals (Su et al., 2020). Previous research results measuring organizational trust using the Organizational Trust Index (OTI) found different perceptions of organizational trust among nurses globally as well as in China.

Based on previous nursing research evidence, factors related to organizational trust can be grouped into personal and organizational factors. Age and work experience are prominent personal factors in nursing research. In an organization, older employees may perceive more positive information, in terms of building trust with the organization, than younger employees (Reed & Carstensen, 2012). As nurses' ages increase, they will trust the hospitals more and integrate more fully into their organization (Tuna et al., 2018). However, there have been inconsistent findings regarding the correlation between age and organizational trust. Work experience, which is the number of years that nurses have been working in a hospital, is also found to be a predictor of organizational trust. Zeffane (2018) argued that work experience positively correlated with organizational trust. Since employees with more work experience are older, as employees get older, they tend to become more reliant and accepting of others, and have a higher propensity for trust.

Regarding organizational factors, perceived organizational support and structural empowerment were found to be prominent factors in nursing research. Perceived organizational support is described as the nurses' perception of the extent to which the department or hospital gives them support, values their contribution, and cares for their well-being in the nursing process (Wang et al., 2014). From the perspective of social exchange, Eisenberger et al. (1990) indicated that employees begin to trust and give feedback to their organizations when they perceive that their organizations value their contributions and care for their well-being.



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Structural empowerment refers to the existence of social structures at work that allow nurses to achieve their work goals through access to opportunities, relevant information, support, and resources, including informal empowerment and formal empowerment (Kanter, 1977; Monje-Amor et al., 2021). Laschinger et al. (2001) stated that with structural empowerment, employees are more satisfied with their work, and trust that the organization can achieve high-quality outcomes. When staff perceive that they have sufficient support, resources, and information to get their work done, they are more likely to trust their organization (Gholami et al., 2019; Laschinger et al., 2001).

Chengdu is the capital of Sichuan Province, a famous historical and cultural city in China, with a total population of 10.03 million and an urban population of 3.3 million. With the development of the economy, medicine, and technology in Chengdu, nursing care has increased its use of technology and information systems. The smart hospital information system is widely used in nursing management, nursing education, and clinical nursing, greatly improving nurses' work efficiency. More and more patients around the province and city come to Chengdu to get treatment and nursing care. In 2022, it was reported that in university hospitals, half of the patients came from other cities or provinces (Chengdu "14th Five-Year Plan" Health Development Plan, 2022).

The number of nurses per thousand people was only 4.44, which is a little higher than the global average of 3.69 per thousand, reported by the WHO in 2018. The competence of healthcare organizations in Chengdu has increased tremendously, and considering the advantages of university hospitals, the Chengdu Municipal Health Commission tries to promote all the tertiary hospitals to cooperate with the comprehensive university in Chengdu to enhance their competence. Zeng (2021) surveyed 40,213 nurses in all 52 tertiary hospitals in Sichuan province and found that nurses' practical environment level was moderate. Low-level value identity and low salaries were also reported.

Based on the current nurse shortage situation in China and the increasing healthcare needs, it is difficult to solve these issues in the short term. Therefore, improving organizational function is considered an important strategy. Studying the factors that predict organizational trust will be beneficial for improving nurses' performance and organizational committees, and decreasing nursing shortages. Most research studies have been done among nurses in the east of China, where the economy and hospital development are different from those of the university hospitals in Chengdu. Therefore, exploring the level and predictability of organizational trust among nurses in university hospitals in Chengdu City, and Sichuan provinces is necessary. The research results can provide hospital managers and organizations with more evidence about Chinese nurses' organizational trust. In addition, an understanding of factors such as age, work experience, perceived organizational support, and structural empowerment as they relate to organizational trust will provide useful information to develop strategies or interventions to improve nurses' organizational trust in the future.



Research objectives

1. To explore the organizational trust of nurses in university hospitals in Chengdu City, the People's Republic of China.
2. To determine the predictability of organizational trust that can be explained by age, work experience, perceived organizational support, and structural empowerment among nurses in university hospitals in Chengdu City, the People's Republic of China.

Conceptual framework

The conceptual model of organizational trust was defined by Shockley-Zalabak et al. (2000). Organizational trust refers to the positive expectations people have about the intentions and actions of networks of others based on roles, relationships, experiences, and their interdependencies (Shockley-Zalabak et al., 2000). Based on the literature review, the factors predicting organizational trust in this study include age, work experience, perceived organizational support, and structural empowerment. Older nurses may perceive information more positively for building trust with the organization than younger employees (Reed & Carstensen, 2012). Employees with long work experience and getting older tend to become more reliable, be accepted, and have a higher propensity for trust. Perceived organizational support (POS) refers to nurses' perception of the extent to which the department or hospital gives them support, values their contribution, and cares for their well-being in the nursing process (Wang et al., 2014). An organization's care and concern for its employees' well-being will be received as affirmative evidence of the organization's trustworthiness (Chen et al., 2005; Singh & Srivastava, 2016). Structural empowerment refers to the existence of social structures at work that allow individuals to achieve their work goals through access to opportunities, relevant information, support, and resources, including informal empowerment and formal empowerment (Kanter, 1977). Employees are more satisfied with their work and perform well for their work because they trust their organization. Therefore, the predictability of organizational trust among selected variables, including age, work experience, perceived organizational support, and structural empowerment, were tested in this study.

Methodology

A descriptive, predictive design was conducted to examine the predictability of organizational trust, which can be explained by age, work experience, perceived organizational support, and structural empowerment.

Population and sampling

The target population of this study was 2,411 registered nurses who work at one of three university hospitals in Chengdu city.

The participants were staff nurses who have worked for at least one year in one of the three hospitals. The exclusion criteria for this sample included registered nurses who were on



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maternity or sick leave, participating in continuing education, or nurse administrators.

The sample size was calculated using the rule of thumb by Polit and Beck (2008). For 1 predictor, 40 participants were recommended. As there were four predictors in this study, the sample size was 160. Considering for possible loss of participants, 20% (32) was added for a final sample size of 192.

The sample size for each hospital was calculated using the proportion of the sample to the population of nurses in each hospital. There were 52 nurses from the Affiliated Hospital of Chengdu University, 72 nurses from the Hospital of Chengdu University of Traditional Chinese Medicine, and 68 nurses from The First Affiliated Hospital of Chengdu Medical College. The simple random sampling method was used to select nurses from the name lists provided by the nursing departments of the three hospitals. Finally, 166 completed questionnaires were returned to the researcher and used for data analysis (86.5%).

Research instruments

1. A demographic data form including 9 items was developed by the researcher and consisted of open and closed-ended questions related to age, gender, marital status, educational level, hospital name, job title, years of work experience, working department, and work shift.

2. The 15-item scale, Survey of Nurse Perceived Organizational Support (SNPOS), was developed by Wang et al. (2014) in Chinese. It is used to measure nurses' perceived organizational support. Nurses rated the extent of agreement with each item on a 5-point Likert-type scale (1 = strongly disagree to 5 = strongly agree) (Wang et al., 2014). Higher scores indicated a higher level of organizational support perception.

3. The 19-item scale, Conditions of Work Effectiveness Questionnaire II (CWEQ II), was developed by Huang et al. (2011) in Chinese. It includes six dimensions: access to opportunity (3 items), access to information (3 items), access to resources (3 items), access to support (3 items), formal power (3 items), and informal power (4 items). Items are rated on a 5-point Likert scale; a higher score indicates a higher level of structural empowerment.

4. The 29 items of the Organizational Trust Index (OTI) developed by Shockley-Zalabak et al. (2000) were used to measure nurses' organizational trust. Alpha reliabilities for the five subscales, each of which measures one dimension of organizational trust, range from 0.85 to 0.90. The researcher translated it into Chinese following Brislin's (1986) translation model without any modification. The translation team included the author, a Chinese monolingual reviewer, a Chinese and English bilingual nurse, and an English expert. After the translation, the reliability of the instrument was tested with 15 nurses who had similar characteristics to the participants in the Affiliated Hospital of Chengdu University.

There were five subscales: competence (4 items), reliability (4 items), openness and honesty (9 items), identification (5 items), and concern for employees (7 items). Items were rated on a 5-point Likert scale (from *very little* to *very great*), with a higher score indicating a higher OT level. The possible scores ranged from 29 to 145 points, and the higher the score, the



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higher the nurses’ organizational trust level. After getting permission from the authors, the interpretation of the scores was classified into high, moderate, and low levels using the class interval formula $M = (M \max - M \min) / k$ (Best & Kahn, 2003). The overall mean scores and scores for the dimensions of the Organizational Trust Index are presented in Table 1.

Table 1 Mean Scores, Overall and for the Dimensions of the Organizational Trust Index

| Organizational Trust | Possible Score | Low | Moderate | High |
|-----------------------|----------------|-------------|--------------|---------------|
| Overall | 29-145 | 29.00-67.66 | 67.67-106.33 | 106.34-145.00 |
| Competence | 4-20 | 4.00-9.33 | 9.34-14.67 | 14.68-20.00 |
| Openness and honesty | 9-45 | 9.00-21.00 | 21.01-33.00 | 33.01-45.00 |
| Concern for employees | 7-35 | 7.00-16.33 | 16.34-25.67 | 25.68-35.00 |
| Reliability | 5-25 | 5.00-11.66 | 11.67-18.33 | 18.34-25.00 |
| Identification | 5-35 | 5.00-11.66 | 11.67-18.33 | 18.34-25.00 |

As the developers tested all instruments' validity using factor analysis, the researcher did not test for validity. The reliability of the three research instruments was tested with 15 nurses, who had similar characteristics to the participants, from the Affiliated Hospital of Chengdu University. The Cronbach’s alpha coefficients of the SNPOS, CWEQ- II, and OTI were 0.97, 0.96, and 0.98, respectively, and the Cronbach’s alpha coefficients of the separate dimensions of the Organizational Trust Index were .90, .90, .90, .89, and .90, which was considered satisfactory for these instruments (Burns & Grove, 2010).

Ethical considerations

This study was approved by the Institutional Review Board (IRB) of the Faculty of Nursing, Chiang Mai University, Thailand (025/2022) on April 25, 2022. Permission to collect data was obtained from the directors of nursing of the Affiliated Hospital of Chengdu University, the Hospital of Chengdu University of Traditional Chinese Medicine, and the First Affiliated Hospital of Chengdu Medical College. The consent form, in a Chinese version, was signed before the beginning of data collection. The completed questionnaire and the consent form were collected separately to assure anonymity and confidentiality.

Data collection

After getting permission to conduct the research from the hospital committees, the researcher asked the nursing director of each hospital to select one staff nurse from each hospital as a research coordinator to distribute and gather the questionnaires. Then, the researcher explained the research purpose, procedure, and duration of data collection to the three coordinators. Each coordinator hospital was then asked to distribute the package of questionnaires to all participants, who, in turn, were requested to complete the questionnaires in their free time. After two weeks, the research coordinators collected the questionnaires from the designated boxes and returned them to the researcher who assessed their completeness



before data analysis.

Data analysis

Data analysis was performed using the Statistical Package for the Social Sciences (SPSS) version 25.0 provided by Chiang Mai University. The subjects' demographic data, and the scores for organizational trust, perceived organizational support, and structural empowerment were analyzed using descriptive statistics, including frequency, percentage, mean, and standard deviation. The assumptions of multiple regression, including normality of residual, homoscedasticity, linearity, autocorrelation, collinearity, and multicollinearity, were met. Therefore, multiple regression with the stepwise method was employed to analyze the predictability of age, years of working experience, perceived organizational support, and structural empowerment on organizational trust.

Results

1. The largest group of subjects were aged between 31 to 35 years old (31.94%). The majority of them were female (84.94%), married (65.66%), and held bachelor’s degrees (76.50%). Regarding employment status, 41.57% of them were senior nurses, and 40.96% were supervisors. Most of them had less than 10 years of work experience and worked in the medical and surgical departments. About half of the subjects worked only the day shift, and the rest worked rotating shifts (Table 2).

Table 2 Frequency and Percentages of the Participants Classified by Demographic Data (n = 166)

| Demographic Data | n | % |
|------------------------|-----|-------|
| Age | | |
| less than 25 years old | 22 | 13.25 |
| 26 – 30 years old | 47 | 28.31 |
| 31 – 35 years old | 53 | 31.94 |
| 36 – 45 years old | 34 | 20.48 |
| More than 46 years old | 10 | 6.02 |
| Gender | | |
| Female | 141 | 84.94 |
| Male | 25 | 15.06 |
| Marital status | | |
| Married | 109 | 65.66 |
| Single | 48 | 28.92 |
| Divorced | 8 | 4.82 |
| Widowed | 1 | 0.60 |



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Table 2 Frequency and Percentages of the Participants Classified by Demographic Data (n = 166)
(continue)

| Demographic Data | n | % |
|---------------------------------|----|-------|
| Educational level | | |
| Bachelor's degree | 3 | 76.50 |
| Master's degree | 33 | 1.81 |
| Diploma degree | 3 | 1.81 |
| Job title | | |
| Senior nurse | 69 | 41.57 |
| Supervisor nurse | 68 | 40.96 |
| Nurse | 20 | 12.05 |
| Deputy chief nurse | 8 | 4.82 |
| Chief nurse | 1 | 0.60 |
| Work experience | | |
| Less than 5 years | 52 | 31.33 |
| 6 – 10 years | 59 | 35.54 |
| 11 – 15 years | 39 | 23.49 |
| More than 16 years | 16 | 9.64 |
| Department | | |
| Surgical | 61 | 36.75 |
| Medical | 50 | 30.12 |
| Pediatric | 16 | 9.64 |
| Emergency | 13 | 7.83 |
| Outpatient | 12 | 7.23 |
| Intensive Care Unit | 9 | 5.42 |
| Operating room | 4 | 2.41 |
| Sterilization and supply center | 1 | 0.60 |
| Work schedules | | |
| Rotating shift | 88 | 53.01 |
| Day shift | 78 | 46.99 |

2. The subjects perceived high organizational trust ($M = 107.60$, $SD = 28.94$). The dimensions of competence ($M = 15.35$, $SD = 3.78$) and identification ($M = 19.16$, $SD = 4.88$) were at high levels. The dimensions of openness and honesty ($M = 32.84$, $SD = 7.65$), concern for employees ($M = 25.3$, $SD = 7.65$), and reliability ($M = 14.95$, $SD = 4.01$) were at moderate levels (Table 3).



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Table 3 Mean, Standard Deviation, and Level of Organizational Trust of the Participants (n = 166)

| Organizational Trust | Range | Mean | SD | Level |
|-----------------------|--------|--------|-------|----------|
| Overall score | 36-145 | 107.60 | 28.94 | High |
| Competence | 6-20 | 15.30 | 3.78 | High |
| Openness and honesty | 10-45 | 32.84 | 7.65 | Moderate |
| Concern for employees | 7-35 | 25.3 | 7.65 | Moderate |
| Reliability | 5-25 | 14.95 | 4.01 | Moderate |
| Identification | 5-25 | 19.16 | 4.88 | High |

3. Perceived organizational support and structural empowerment were predictors of organizational trust ($\beta = .208, p < .05$ and $\beta = .631, p < .001$, respectively). These two predictors could explain 66.6% ($R^2 = .666$, Adjusted $R^2 = .662$, $F = 162.408, p = .001$) of the variability in organizational trust among nurses in tertiary hospitals in Chengdu (Table 4).

Table 4 Multivariate Linear Regression Analysis of the Factors Predicting Organizational Trust as Perceived by the Participants (n = 166)

| Dependent Variable | Predictors | B | β | Tolerance | VIF | t | P value |
|----------------------|----------------------------------|------|---------|-----------|-------|-------|---------|
| Organizational trust | Perceived organizational support | .011 | .208 | .264 | 3.782 | 2.359 | .02* |
| | Structural empowerment | .026 | .631 | .264 | 3.782 | 7.165 | .000** |

Note. $R^2 = .666$, Adjusted $R^2 = .662$, $F = 162.408$

* $p < .05$ ** $p < .001$

Discussion

1. The level of organizational trust of nurses in university hospitals in Chengdu City, People's Republic of China

The findings of this study show that subjects perceived the overall score of organizational trust at a high level (Table 3). It was indicated that most of the nurses working in university hospitals in Chengdu felt their thoughts and opinions were valued and respected, and they were willing to work cohesively towards the common hospital goals. Based on the concept of organizational trust, nurses perceived effective hospital competence, had good communication with the hospital, and were satisfied with their hospital.

The results of the present research are consistent with the findings of Chen et al. (2021) who studied 538 nurses in five tertiary hospitals in Guangxi province. This is probably because, regardless of the different work in different provinces in China, nurses experience similar working conditions in terms of job satisfaction and effectiveness. Regarding the results of the five



Factors Predicting Organizational Trust of Nurses in University Hospitals,
Chengdu City, Sichuan Province, the People's Republic of China
ปัจจัยทำนายความไว้วางใจในองค์กรของพยาบาลในโรงพยาบาลมหาวิทยาลัย
เมืองเฉิงตู มณฑลเสฉวน สาธารณรัฐประชาชนจีน

dimensions of organizational trust, the dimensions of competence and identification were perceived at a high level, while openness and honesty, concern for employees, and reliability were perceived at moderate levels.

Nurses perceived competence at a high level, which indicated that nurses perceived their hospital had a high ability to achieve its objectives. The reason may be explained by the fact that university hospitals in China are considered experts in clinical practice, education, and innovation. The three university hospitals were class A tertiary general hospitals integrating medical treatment, teaching, and scientific research. According to the annual report of the three hospitals, the outpatient and emergency visits are about 1.5-2 million, and nearly 50,000-70,000 people are hospitalized in each hospital every year.

Additionally, the three hospitals are developing “smart hospitals” to reduce the nursing workload. For example, information technology has been used for human resources management, nursing quality management, and nursing education. The wise use of information technology is an essential means to improve the efficiency and trustworthiness of healthcare organizations (Pan & Wang, 2022).

Nurses perceived a moderate level of the open and honest dimension meaning nurses think their managers or supervisors are somewhat confident in them and hope they are evaluated fairly in job performance. It was reported that the head nurses in the tertiary hospitals in Sichuan province had good scores for communication competence (He et al., 2023). With the development of smart hospitals, nurses can communicate with the head nurse or director openly and honestly whenever they face problems or difficult situations in their nursing units. This might be a possible explanation for nurses' trust and their sense of self-worth (Wu, 2022).

Nurses perceived a moderate level of concern for the employee dimension, which indicated that nurses feel the organization, or supervisors need to listen to them more, and be more concerned about their well-being. The hospitals implemented various policies that concerned employees. For example, with the support of the trade union, the Affiliated Hospital of Chengdu University and the First Affiliated Hospital of Chengdu Medical College offer childcare for employees during winter and summer holidays, which helps nurses and their families, improving nurses' well-being. In addition, the hospital has a mental health clinic for the staff, showing their concern about nurses' physical and mental development. The organization also pays more attention to nurses' daily lives. For example, an appointment scheduling system is implemented in most tertiary hospitals in Chengdu so that nurses can spend more time with their families. All these policies influenced nurses' concerns about the hospital.

Nurses perceived a moderate level for the reliability dimension. This means nurses think their organization is somewhat reliable in terms of keeping commitments and basic follow-through. As the three hospitals are tertiary level with a hierarchical structure, it might be difficult to communicate the hospital plan or performance evaluation to each employee. Nurses do not have opportunities to seek reasons because they are busy taking care of patients. Individual nurses



may pay more attention to the reliability of their salary, benefits, and professional development (Wu, 2022), but only nurse administrators convey messages from the hospital administrators to nurses in the units. Therefore, nurses may perceive the reliability of the organization at a moderate level.

Nurses perceived the identification dimension at a high level, demonstrating that nurses believed their values were reflected in the values of the organization. The hospital's goals may match the individual's goals. Therefore, nurses pay attention to the development of the hospital and have a strong sense of belonging. One of the university hospital's advantages is that nurses have more chances for professional development (Dong et al., 2020), and further education can improve nurses' value. Especially after the COVID-19 pandemic, nurses are considered to have an important role in medical care, and nurses' social status and organization identification have improved in these two years (Wu, 2022).

2. The predictability of age, working experience, perceived organizational support, and structural empowerment on organizational trust

This study revealed that perceived organizational support was positively related to organizational trust ($\beta = .208, p < .05$). This meant that nurses who perceived a higher level of organizational support were more likely to have strong organizational trust. This result could explain that perceived organizational support was vital for developing a positive attitude which could be applied to a wide range of demands for fostering organizational trust (Shukla & Rai, 2015). Based on the literature review, employees will trust the organization when they believe their immediate supervisors or managers are concerned about their well-being (Eisenberger et al., 1990). The administrators of organizations will be trusted when policies and procedures reflect concern for the well-being of employees, generally, such as through fair performance evaluations and promotional practice safety procedures (Shockley-Zalabak & Morreale, 2011).

Wang et al. (2014) defined perceived organizational trust of nurses as nurses' comprehensive perception of the extent to which a department or hospital gives them support, values their contributions, and cares for their well-being in the nursing process. When nurses perceive that the organization or their managers support them, either in attitude or through work support, they will trust the organization and try their best to help it complete its objectives (Tao et al., 2023).

Another reason might be due to the nurses having opportunities for promotion. According to the continuing educational programs of the three target hospitals, the hospitals spend considerable sums of money to help nurses enhance their professional competence. In terms of employee well-being, some hospitals even help the staff take care of their children in the summer and winter holidays. Employees' children can also attend the university-affiliated primary school which is a significant benefit for university hospital nurses. Therefore, nurses in the university hospitals in Chengdu perceived that their organization values their contributions and cares about their well-being and always tries their best to support their work, leading them to trust their hospitals and believe those hospitals can achieve their goals. The finding was consistent with a study among



Factors Predicting Organizational Trust of Nurses in University Hospitals,
Chengdu City, Sichuan Province, the People's Republic of China
ปัจจัยทำนายความไว้วางใจในองค์กรของพยาบาลในโรงพยาบาลมหาวิทยาลัย
เมืองเฉิงตู มณฑลเสฉวน สาธารณรัฐประชาชนจีน

nurses in Turkey (Akkoç & Yilmaz, 2019) and another study in Iran (Shateri & Hayat, 2020).

This study also found that structural empowerment was a predictor of organizational trust ($\beta = .631, p < .001$). This meant that nurses who perceived a higher level of structural empowerment were more likely to have strong organizational trust. This can explain how nurses who get more opportunities, relevant information, support, and resources will trust their organization more (Hall, 2021). With the development of nursing management, the structural empowerment of nurses has become valued (Zhang, 2021). Due to the development of the economy and the aging population, people's requirements regarding healthcare are higher. This influences nurses to respond to patient needs with safe, quality care. In the three university hospitals, 10% of nurses were appointed to be advanced nurses or senior nurses who have more experience working as clinical nurse specialists. The organizational structure of nurses' positions could empower nurses to work for organizational goals. The results of this study are in line with the findings of Gholami et al. (2019) ($r = 0.488, p < 0.001$) and Laschinger et al. (2012) ($r = 0.41, p < 0.05, r = 0.45, p < 0.05$) who both found a relationship between structural empowerment and organizational trust.

Conclusions and implications

The findings of this study revealed a high level of organizational trust among nurses. According to the definition of organizational trust, it indicated that nurses in the three hospitals have positive expectations about the intentions and actions of networks of others based on roles, relationships, experiences, and interdependencies. In addition, perceived organizational support and structural empowerment could predict organizational trust among nurses in Chengdu City, Sichuan Province, the People's Republic of China.

Application of research findings

Hospital and nurse administrators should maintain nurses' competence and identification which were perceived at high levels. Nursing managers should motivate and support their nurses to work in their organization, especially valuing their contributions and caring for their wellbeing. These are important ways to enhance nurses' organizational trust. The intervention of perceived organizational support and structural empowerment should be developed to improve organizational trust among nurses in university hospitals.

Suggestions for further research

1. Researchers should replicate the study among nurses in other types of hospitals in different regions of China.
2. Mixed methods research designs which combine qualitative and quantitative methods may provide a comprehensive understanding of factors that influence or affect organizational trust among nurses in China where the context and situation are different from Western countries.



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Factors Predicting Organizational Trust of Nurses in University Hospitals,
Chengdu City, Sichuan Province, the People's Republic of China
ปัจจัยทำนายความไว้วางใจในองค์กรของพยาบาลในโรงพยาบาลมหาวิทยาลัย
เมืองเฉิงตู มณฑลเสฉวน สาธารณรัฐประชาชนจีน

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Factors Predicting Organizational Trust of Nurses in University Hospitals,
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เมืองเฉิงตู มณฑลเสฉวน สาธารณรัฐประชาชนจีน

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