

ความยุติธรรมในองค์กรและพฤติกรรมการออกสิทธิหรือออกเสียงของพยาบาล  
ในโรงพยาบาลตติยภูมิของต้าหลี่ สาธารณรัฐประชาชนจีน  
Organizational Justice and Voice Behavior of Nurses in Tertiary Hospitals  
of Dali, the People's Republic of China

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### บทคัดย่อ

ความยุติธรรมในองค์กรและพฤติกรรมการออกสิทธิหรือออกเสียงของพยาบาลมีความสำคัญในระบบสุขภาพที่ให้ผลลัพธ์ในทางบวกแก่องค์กรและคุณภาพการพยาบาล การศึกษาเชิงพรรณนาหาความสัมพันธ์นี้มีวัตถุประสงค์เพื่อศึกษาความยุติธรรมในองค์กรพฤติกรรมการออกสิทธิหรือออกเสียงและศึกษาความสัมพันธ์ของความยุติธรรมในองค์กรและพฤติกรรมการออกสิทธิหรือออกเสียงของพยาบาลกลุ่มตัวอย่างคือพยาบาลจำนวน 299 คนที่ทำงานในโรงพยาบาลตติยภูมิแห่งต้าลี่ ประเทศสาธารณรัฐประชาชนจีน เครื่องมือวิจัยประกอบด้วยแบบวัดสี่ปัจจัยของความยุติธรรมในองค์กรของ Colquitt (2001) โดยมีค่าสัมประสิทธิ์สหสัมพันธ์ของอัลฟาเท่ากับ .86 และแบบวัดพฤติกรรมการออกสิทธิหรือออกเสียงสองมิติของ Liang and Farh (2008) โดยมีค่าสัมประสิทธิ์สหสัมพันธ์ของอัลฟาเท่ากับ .84 สำหรับการออกสิทธิหรือออกเสียงแบบส่งเสริม และ .68 สำหรับการออกสิทธิหรือออกเสียงแบบยับยั้ง วิเคราะห์ข้อมูลโดยสถิติเชิงพรรณนาและสัมประสิทธิ์สหสัมพันธ์แบบสเปียร์แมน

### ผลการศึกษาพบว่า

1. ความยุติธรรมในองค์กรโดยภาพรวมอยู่ในระดับปานกลาง ( $\bar{X}$ =70.54, SD=11.30) ความยุติธรรมด้านการแบ่งสรรผลประโยชน์และความยุติธรรมด้านกระบวนการอยู่ในระดับปานกลาง ( $\bar{X}$ =11.99, SD=3.96;  $\bar{X}$ =23.99, SD=4.18 ตามลำดับ) ส่วนการรับรู้ความยุติธรรมด้านการปฏิสัมพันธ์ และความยุติธรรมด้านข้อมูลอยู่ในระดับสูง ( $\bar{X}$ =15.72, SD=2.38;  $\bar{X}$ =18.84, SD=3.16 ตามลำดับ)
2. พฤติกรรมการออกสิทธิหรือออกเสียงแบบการส่งเสริมอยู่ในระดับสูง ( $\bar{X}$ =19.07, SD=2.78) ในขณะที่พฤติกรรมการออกสิทธิหรือออกเสียงแบบยับยั้งอยู่ในระดับปานกลาง ( $\bar{X}$ =21.81, SD=4.08)
3. ความยุติธรรมในองค์กรและพฤติกรรมการออกสิทธิหรือออกเสียงแบบส่งเสริม ( $r=.405$ ,  $p<.01$ ) และพฤติกรรมการออกสิทธิหรือออกเสียงแบบยับยั้งมีความสัมพันธ์กันอย่างมีนัยสำคัญในระดับปานกลาง ( $r=.434$ ,  $p<.01$ ).

ผลการศึกษานี้เป็นข้อมูลพื้นฐานสำหรับผู้บริหารการพยาบาลในการพัฒนากลยุทธ์ในการส่งเสริมให้มีความยุติธรรมในองค์กรและพฤติกรรมการออกสิทธิหรือออกเสียงของพยาบาลในโรงพยาบาลตติยภูมิแห่งต้าลี่ ประเทศสาธารณรัฐประชาชนจีน

**คำสำคัญ:** ความยุติธรรมในองค์กร พฤติกรรมการออกสิทธิหรือออกเสียง พยาบาล สาธารณรัฐประชาชนจีน

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## Abstract

Organizational justice and voice behavior are important components of the healthcare system to reach positive organizational outcomes and quality nursing care. This descriptive correlational study aimed to explore organizational justice and voice behavior and to examine the relationship between organizational justice and voice behavior of nurses. The sample included 299 nurses in two tertiary hospitals of Dali, the People's Republic of China. The research instruments included the Four-Factor Organizational Justice Scale (Colquitt, 2001) with the Cronbach's alpha coefficient of .86 and the Two-Dimension Voice Behavior Scale (Liang & Farh, 2008) with the Cronbach's alpha coefficient of .84 for promotive voice and 0.68 for prohibitive voice. Data were analyzed by descriptive statistics and Spearman's rank-order correlations.

### The results were presented as follows:

1. The mean score of overall organizational justice was at a moderate level ( $\bar{X}=70.54$ ,  $SD=11.30$ ). Four dimensions including distributive justice and produce justice were at a moderate level ( $\bar{X}=11.99$ ,  $SD=3.96$ ;  $\bar{X}=23.99$ ,  $SD=4.18$ , respectively), while interpersonal justice and informational justice were at a high level ( $\bar{X}=15.72$ ,  $SD=2.38$ ;  $\bar{X}=18.84$ ,  $SD=3.16$ , respectively).
2. The mean score of promotive voice was at a high level ( $\bar{X}=19.07$ ,  $SD=2.78$ ), while prohibitive voice was at a moderate level ( $\bar{X}=21.81$ ,  $SD = 4.08$ ).
3. There were significantly moderately positive correlation between organizational justice and promotive voice ( $r=.405$ ,  $p<.01$ ), prohibitive voice ( $r=.434$ ,  $p<.01$ ).

The results of this study would provide baseline information for nursing managers to develop strategies to increase organizational justice and enhance the nurses' voice behavior in Tertiary Hospital of Dali, the People's Republic of China.

**Keywords:** *Job Crafting, Organizational Commitment, China, Nurse*

## Background and Significance

Nurses' voice behavior is a key factor in improving patient health and safety (Ronald, 2017). The Institute of Medicine of the United States (U.S.) reported voice behavior is essential to promoting patient safety and quality of care through an increase in nurses' reporting of errors (Page, 2004). The Joint Commission (2012) determined that more than 80% of serious medical errors are related to communication. Nurses as front-line staff are in the best position to iden-

tify issues and concerns that affect the quality of care for their patients. However, many nurses often choose to hide their real thoughts in organization and they tend to keep quiet in the face of important problems (Tangirala & Ramanujam, 2008). When nurses are reluctant to speak up on work issues and concerns, it has a negative impact on patient safety and on the organization's ability to learn from errors (Okuyama, Wagner, & Bijnen, 2014). Therefore, it is important promote voice behavior among nurses.

Voice behavior is defined as an extra-role behavior when an employee voluntarily expresses constructive suggestions or points out problems to improve the organizations' status quo (Liang & Farh, 2008). There are two dimensions: Promotive voice was defined as employees' expression of new ideas or suggestions for improving the overall functioning of the work unit or organization. Prohibitive voice was defined as employees pointing out problems in the working places to reduce factors that hinder organization efficiency (Liang & Farh, 2008). In some studies related to voice behavior of nurses, the results ranged from moderate to high levels. However, there has been no study done in Dali. The nurses' willingness to speak up positively affects both patient safety and quality of care (Maxfield, Grenny, Lavandero & Groah, 2011). However, the Chinese cultural emphasis on maintaining harmonious interpersonal relationships cause nurses to worry about voice behavior breaking the authority of the manager that lead to nurses unwilling to say out loud the problems at work.

Organizational justice was found as an important factor of voice behavior. Organizational justice was defined as the fairness of outcomes and procedures that allocate the outcomes in organizations (Colquitt, 2001). It included distributive justice, Distributive justice refers to the fairness associated with the decision related to the distribution of resource within an organization. Procedural justice refers to employees' perception of the fairness of the management policies and procedures that regulate a process leading to decision outcomes.

Interpersonal justice refers to perception of respect and propriety in one's treatment. Informational justice refers to perception of whether an employer is providing timely and the adequate information and explanations (Colquitt, 2001). There are some studies of organizational justice among nurses, but the results showed different levels. Some studies confirmed the relationship between organizational justice and voice behavior (Ji, 2013; Takeuchi, Chen, & Cheung, 2012). Ji (2013) found that employee voice behavior was explained by organizational justice ( $r=.589$ ,  $p<.001$ ).

This study was conducted in tertiary hospitals of Dali, the People's Republic of China. Based on Chinese higher power distance culture, the Chinese nurses were more inclined to obey the decisions of their superiors or to remain silent when they faced practical problems. They try to maintain harmony with others and avoid criticism, ridicule, rejection, and punishment (Bienesfeld & Grote, 2012). He (2014) confirmed that low social status and a lack of respect influence individual voice behavior. Moreover, Sun (2012) showed that more than 50% of Chinese nurses thought the distribution of salary was unfair. Nurses earn only 70% of what doctors earn and 91% of nurses have no chance to participate in organizational planning and decision-making (Cao, 2008). These situations may influence organizational justice and voice behavior of nurses in China.

However, there was a relationship between organizational justice and voice behavior in other area and Western countries, but inconsistent findings were reported. Findings of other

studies may not be applicable to Chinese organizations because of different perceptions of organizational justice and voice behavior from different cultural backgrounds. Thus, it was worthwhile to examine the level of two variables, and their relationship in order to provide useful information for improving work organizational justice and voice behavior in Tertiary Hospitals of Dali, the People's Republic of China.

## Objectives

The objectives of this study were to explore the levels of organizational justice and voice behavior as well as the relationship between these two variables of nurses in two Tertiary Hospitals of Dali, the People's Republic of China.

## Conceptual Framework

The conceptual framework of this study was based on concepts of the Four-factor organizational justice (Colquitt, 2001) and Two-dimension voice behavior (Liang & Farh, 2008). Organizational justice was defined as the fairness of outcomes and the procedures that allocate the outcomes in organizations. It includes four dimensions: distributive justice, procedural justice, interpersonal justice, and informational justice (Colquitt, 2001). Distributive justice refers to the fairness associated with the decision related to the distribution of resource within an organization. Procedural justice refers to employees' perception of the fairness of the management policies and procedures that regulate a process leading to decision outcomes. Interpersonal justice refers to perception of

respect and propriety in one's treatment. Informational justice refers to perception of whether an employer is providing timely and the adequate information and explanations (Colquitt, 2001). When the nurses perceive fair pay, equal opportunities for promotions, and truthful, timely and reasonable information, the nurses are more willing to express their ideas or suggestions and point out problems at work. Therefore, organizational justice may be positively correlated to voice behavior. Voice behavior was defined as an extra-role behavior that employees voluntarily express constructive suggestions or point out problems to improve the organizations' status quo. It includes two dimensions: promotive voice and prohibitive voice (Liang & Farh, 2008). Promotive voice was defined as employees' expression of new ideas or suggestions for improving the overall functioning of the work unit or organization. Prohibitive voice was defined as employees pointing out problems in the working places to reduce factors that hinder organization efficiency (Liang & Farh, 2008). The relationship between organizational justice and voice behavior will be explored among nurses in Tertiary Hospitals of Dali, the People's Republic of China.

## Methodology

### Population and Sampling

The descriptive correlation study was designed to study a population 1,160 of nurses who had been working for at least one year in two tertiary hospitals of Dali. Yamane's, (1973) formula was used to calculate the sample size, with the level of .05. Considering the possible

loss of samples, 20% of the sample size was added (Israel, 2003), 356 questionnaires were distributed to collect data, among which 310 (87%) were returned. Only 299 (84%) questionnaires were completed and used for data analysis. Proportional stratified random sampling method was used to determine the number of nurses from eight clinical departments in each hospital, while participants were selected by simple random sampling from the name list in each department of two hospitals.

### Research instruments

The instrument was a questionnaire consisting of three parts: 1) the demographic data form 2) the Four-factor Organizational Justice Scale (FFOJS) developed by Colquitt, (2001). It has 20 items including distributive justice, procedural justice, interpersonal justice, and informational justice and 3) the Two-Dimension Voice Behavior Scale (TDVBS) developed by Liang and Farh, (2008). It consisted of 11 items and 2-dimension, promotive voice and prohibitive voice. Both variables were rated on the 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Validity of the instruments was tested by the original authors. The FFOJS (Colquitt, 2001) with the Cronbach's alpha coefficient of .86 and the TDVBS (Liang & Farh, 2008) with the Cronbach's alpha coefficient of .84 for promotive voice and .68 for prohibitive voice.

### Ethical Consideration and Data Collection

This study obtained approval from the Research Ethics Review Committee of Faculty of Nursing, Chiang Mai University, Thailand. And permission to collect data was obtained from

the dean and director of each hospital.

### Data analysis

Data was analyzed using statistical software package, Descriptive statistic was used to analyze demographic data and the level of both variables. The data distribution violated the assumption of normality, therefore, Spearman's rank-order correlation coefficient analysis was used to analyze the relationship between organizational justice and voice behavior of staff nurses.

### Results

Demographic characteristics of participants. Among the 299 samples of this study, 97.66% of them were female with an average age of 31.55 years old ( $SD=6.57$ , Range=22-55), and 78.59% of the samples were married. Approximately (50.84%) of the samples held a bachelor degree. The majority of the samples (72.91%) had 1-10 years working experience with a mean of 9.57 years ( $SD=7.09$ , Range= 1-39). Nearly half of the samples (48.49%) were senior nurses. About 30.10% of the samples worked in the medical department, and 30.77% of samples worked in the surgical department. More than half (63.21%) were temporary nurses. And 67.90% of them earned an income of less than 5000 RMB per month with only 4.01% of the samples had an income of more than 7000 RMB per month.

Organizational justice. The nurses perceived the overall organizational justice at a moderate level ( $\bar{X}=70.54$ ,  $SD=11.30$ ). Two dimensions including distributive justice and procedural justice were at a moderate level

( $\bar{X}$ =11.99, SD=3.96;  $\bar{X}$ =23.99, SD=4.18, respectively), while interpersonal justice and informational justice were at a high level ( $\bar{X}$ =15.72, SD=2.38;  $\bar{X}$ =18.84, SD=3.16, respectively).

**Voice behavior.** The nurses' promotive voice was at a high level ( $\bar{X}$ =19.07, SD=2.78) while their prohibitive voice was at a moderate

level ( $\bar{X}$ =21.81, SD=4.08).

The relationship between organizational justice and voice behavior. The results showed that there were significantly moderately positive correlations between organizational justice and promotive voice ( $r=.405$ ,  $p<.01$ ), and prohibitive voice ( $r=.434$ ,  $p<.01$ ) (Table 1).

**Table 1** Relationship between Organizational Justice and Each Dimension of Voice Behavior of Samples ( $n=299$ )

Variables	Organizational Justice
Promotive voice	.405**
Prohibitive voice	.434**

\*\*  $P<.01$

## Discussion

### Organizational justice

The results of this study indicated that staff nurses perceived the overall score of organizational justice in tertiary hospitals of Dali at a moderate level ( $\bar{X}$ =70.54, SD=11.30). This result was consistent with a previous study by Zhang, Yang, Huang, Zhao and Yang, (2016) ( $\bar{X}$ =73.77, SD=12.45). The following sections discusses details each dimension of organizational justice in more detail:

**Distributive justice.** The results showed that participants perceived distributive justice at a moderate level ( $\bar{X}$ =11.99, SD=3.96). The finding was similar with a study conducted by Zhang et al. (2016) ( $\bar{X}$ =12.50, SD=3.22). The moderate level results could be related to nurses receiving job promotions in recent years. Some current projects of the hospital to develop the workers skills and an opportunity to study new knowledge was organized by the

government and provided some learning opportunities for staff nurses. Additionally, nurses have the same opportunities as doctors to study abroad and obtain corresponding degrees in tertiary hospitals of Dali. These policies increase learning resources for nurses. However, the nurses perceived distributive justice was the lowest score in this study. In Chinese hospitals, the average daily working time of nurses was longer than standard due to the nursing shortage, but the salary distribution system cannot be based on individual performance and the work ability of the hospitals (Jiang & Chen, 2016). When nurses feel that their income does not conform to their contribution, they have a sense of distribution unfairness (Guo, Geng, Deng, & Yang, 2015). Additionally, temporary nurses and permanent nurses were employed for a similar job but receive different wages and benefits (Yang, 2012). Housing allowance is not provided to temporary nurses who work in the tertia-

ry hospitals of Dali (Shang You, & Ma, 2014). Thus, this unequal treatment decrease the nurses perception of distribution fairness.

**Procedural justice.** The result showed that nurse perceived procedural justice at a moderate level ( $\bar{X}$ =23.99, SD=4.18). It was consistent with previous studies conducted among nurses in tertiary hospitals by Wang and Li (2017). The reason could be related to the high level of self-directed decision making that staff nurses have in tertiary hospitals of Dali. Staff nurses have the power to decide on the time to give health education to the patient and to write the nursing record. Whereas staff nurses were placed at the bottom of the hierarchy in the Chinese health care system (Xianyu & Lambert, 2006). Major decisions about vision and goals of the hospital are made by the manager and executives, but staff nurses have little opportunity to participate and express their thinking in important decision-making and policy-making for the hospital (Zhang & Wu, 2015). These ideas are supported by the result of this study in which only 30.44% of nurses agree and strongly agree that they were able to express their views during the decision-making processes.

**Interpersonal justice.** The result showed that nurses perceived interpersonal justice at a high level ( $\bar{X}$ =15.72, SD=2.38). This finding was consistent with a previous study by Zhang et al. (2016) ( $\bar{X}$ =16.76, SD=4.60). It could be related to the high level of interpersonal harmony in tertiary hospitals of Dali (Zhu, 2017). Duan, (2016) showed that head nurses and top managers treat staff nurses in a polite manner, with dignity and respect, and refrain from improper remarks to

maintain a good relationship. Additionally, the average work experience was 9.57 (SD=7.09) years. During this long time period, staff nurses, colleagues, head nurses, and top managers know each other very well and have good relationships between them. Therefore, nurses perceived a high level of interpersonal justice.

**Informational justice.** The result showed that nurses perceived informational justice was at a high level ( $\bar{X}$ =18.84, SD=3.16). It was consistent with previous studies by Zhang et al., (2016) ( $\bar{X}$ =19.63, SD=2.57). Every week, there was a meeting for middle level managers and every morning, there was a shift changing report in all the units for nurses, physicians, head nurses and directors in tertiary hospitals of Dali. Head nurses for the high level of informational justice is that information is often conveyed and decisions are explained to nurses at that time. In addition, the network at the tertiary hospitals of Dali were recently strengthened. All kinds of information are announced through an intranet system. Thus, the head nurse could send useful information to nurses in a timely manner. So there were many reasons why the nurses perceived informational justice at a high level.

#### Voice behavior

This study found that nurses promotive voice ( $\bar{X}$ =19.07, SD=2.78) was at high level and prohibitive voice ( $\bar{X}$ =21.81, SD=4.08) was at a moderate level. The detailed results of each dimension of voice behavior in this study are discussed as follows:

**Promotive voice.** The result showed that nurses promotive voice behavior was at a high level ( $\bar{X}$ =19.07, SD=2.78). It was consistent with

previous studies by Li (2006) ( $\bar{X}$ =20.58,  $SD$ =4.63). With the development of science and technology, office automation was most used in tertiary hospitals of Dali. Nurses and leaders can communicate online anytime and anywhere (Wang, 2013). This leads to an increase in communication, and at the same time avoid the awkwardness of face-to-face communication. Another reason may be related to more than half of samples (50.84%) held a bachelor's degree in this study. Highly educated employees have better organizational learning skills and are more willing to propose new view, ideas, or new technologies to change or improve the organization (Zhou & Liao, 2013).

**Prohibitive voice.** The results showed that nurses experienced prohibitive voice at a moderate level ( $\bar{X}$ =21.81,  $SD$ =4.08). It was consistent with previous studies by Li, (2016) ( $\bar{X}$ =18.87,  $SD$ =3.83), It might be related to psychological empowerment was at a high level in tertiary hospitals of Dali (Fu, 2017). Nurses with a high level of psychological empowerment were more attached to the nursing organization, and when nurses found serious problems that could cause a loss to the department, they would speak up honestly (Qi, Wei, & Zhen, 2015). Additionally, the Quality Control Circle (QCC) project was implemented and the quality control teams was established for nearly two years in tertiary hospitals of Dali. The managers create an environment that supports and accepts nurses' suggestions, increasing the nurses' confidence to speak up regarding work-related ideas and concerns. However, the result of this study was inconsistent with the previous study by Du

(2017) who found prohibitive voice was at a high level. This could be because more than half of the participants (55.85%) are younger than 30 years old in this study. Young nurses lack experience and ability and were generally engaged in treatment and nursing work under the guidance of supervisors, so were less responsible for the organization and management in their work (Zheng & Wang, 2017).

The relationship between organizational justice and voice behavior of nurses

There was moderate positive relationship between organizational justice and each subscale of voice behavior. This indicates that organizational justice was an essential factor in the nurses' decision to speak up.

Relationship between organizational justice and promotive voice. The study found that there was a moderately positive relationship between organizational justice and promotive voice ( $r=.405$ ,  $p<.01$ ). This result was supported by the previous study (Ji, 2013).

Voice behavior is a kind of extra-role behavior (Liang & Farh, 2008) in which the nurse has the right to advise, and right not to talk, which mainly depends on the nurse's attitude. Hence, if nurses experience organizational justice in their work environment, they will generate more trust and support for the organization, thereby showing more extra-role behaviors conducive to organizational development, including promotional voice aimed at improving the status quo of the organization (Lv & Hao, 2009). Additionally, in this study, 81.61% of the participants agree (score 4 to score 5) that supervisors treated them with respect. If an orga-



nization fully respects nurses and asks them for advice in decision-making, nurses feel that their suggestions can be valued by the organization. Hence nurses are more likely to engage in speaking up behavior (Aranzamendez, 2014).

Relationship between organizational justice and prohibitive voice. This study found that there was a moderately positive association between organizational justice and prohibitive voice ( $r=.431, p<.01$ ). This found was supported by Ji, (2013) who found that all types of organizational justice dimensions serve a function in encouraging followers to speak out on work-related issues in the organization.

Organizational justice is an indispensable prerequisite for nurse's advice behavior, because the nurses' advice behavior is a kind of challenge to the status quo of work to some extent (Takeuchi et al., 2012). Hence, to engage in a prohibitive voice, nurses must first determine the degree that the organization environment is safe for speaking up. Application of the six rules that forms the process of procedural justice (consistency, impartiality, accuracy, ethical standards, representativeness, and correctability) will create a working environment where nurses believe that they are psychologically safe. Therefore, in a psychologically safe environment created by the application of procedural justice rules, the nurses are more likely to point out problems of work without any hesitation. Additionally, prohibitive voice is to stop or prevent harm (Liang, 2007). Its premise is to obtain enough information within the organization (Mei, 2012). Whether it is fair for nurses to obtain information and whether the information obtained is accurate, this

affects the nurses' finding problems in their work. Therefore, the informational justice of nurses related to nurses' prohibitive voice.

## Conclusions and Recommendations

The level of organizational justice was at a moderate level. Four dimensions including distributive justice and produce justice were at a moderate level, while interpersonal justice and informational justice were at a high level. The level of promotive voice was at a high level, while prohibitive voice was at a moderate level. The study revealed that organizational justice has a moderately positive relationship with promotive voice and prohibitive voice.

## Implication of Research Findings

Nursing administrators should be more concerned with the importance of a fair work environment by providing fair pay, promotions, and opportunities for taking part in decision making to increase the voice behavior of nurses. Fair interpersonal treatment, truthfulness, timely and reasonable explanations to improve nurses' voice behavior should be kept at a high level.

## Recommendations

Further research using qualitative or mixed methods studies could be conducted to provide insight into the perceptions of healthcare providers about perceptions of organizational justice and voice behavior in the workplace. Additionally, it would be worthwhile to conduct further similar studies for nurses in different level of hospitals.

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