#### **CHAPTER 4**

#### FINDING AND DISCUSSION

The purposes of this study are to examine communication satisfaction, organizational effectiveness and the relationship between each dimension of communication satisfaction and organizational effectiveness among nurses in university hospitals, Kunming, the People's Republic of China. The findings are presented in four parts with tables and descriptions: (1) demographic data of the subjects; (2) communication satisfaction as perceived by the subjects; (3) organizational effectiveness as perceived by the subjects; and (4) the relationship between each dimension of communication satisfaction and organizational effectiveness among the subjects. Discussion is conducted based on research objectives and the results of the study.

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#### **Findings**

### Part I: Demographic Data of the Subjects

Sample for this study consisted of 376 nurses and the demographic data of the subjects are presented in table 2.

Table 2

Frequency, Percentage, Mean, Standard Deviation, and Range of the Subjects

Categorized by Demographic Characteristics (n = 376)

Demographic Data	Frequency (n)	Percentage (%)
Age (years) ( $\overline{X} = 31.88$ , SD = 7.43, range =	19-53)	70%
≤ 20	6	1.60
21-30	183	48.67
31-40	137	36.44
41-50	46	12.23
> 50	4	1.06
Marital status		
Single	111	29.52
Married	249	66.22
Divorced	15	3.99
Widowed	1	0.27
Educational level		
Secondary technical certificate	35	9.31
Diploma	149	39.63
Bachelor degree	189	50.26
Master degree	3	0.80

Table 2 (continued)

Demographic Data	Frequency (n)	Percentage (%)
Professional title	9/	
Junior nurse	138	36.70
Nurse practitioner	151	40.16
Nurse in charge	87	23.14
Years of work experience (years) ( $\overline{X} = 11.35$ ,	SD = 8.43, range = 1-36	5)
1-10	204	54.26
11-20	118	31.38
21-30	46	12.23
> 30	8	2.13
Clinical department		
Medical department	74	19.68
Surgical department	214	56.91
Pediatric department	7	1.86
Obstetric-Gynecology department	31	8.24
Intensive care unit	15	3.99
Operating room	8	2.13
Emergency room	14	3.72
Out-patient department	13	3.47

Table 2 showed that the age of the subjects ranged from 19 to 53 with  $\overline{X}$  = 31.88 and SD = 7.43. Nearly half of the subjects (49.73%) were between 20-30 years old, and the majority of the subjects were married (66.22%). Only half of the subjects (50.26%) held a bachelor degree, and the second large group of them (39.63%) held a diploma degree. Around two fifths of the subjects (40.16%) were nurse practitioners, more than half of the subjects (54.26%) had 1-10 years working experience with a range from 1 to 36, and the mean of working experience was 11.35 years (SD = 8.43).

About 56.91% subjects worked in surgical department, and 19.68% of the subjects worked in medical department.

#### Part II: Communication Satisfaction as Perceived by the Subjects

This part illustrates the level of overall and each dimension of communication satisfaction as perceived by the subjects. The results are showed in Table 3.

Table 3

Means, Standard Deviations, and the Level of Overall and Dimensions of Communication

Satisfaction as Perceived by the Subjects (n = 376)

Communication satisfaction	Mean	SD	Level
Overall communication satisfaction	4.19	0.41	Moderate
Communication climate	4.08	0.94	Moderate
Supervisory communication	4.27	0.98	Moderate
Organizational integration	4.27	0.87	Moderate
Media quality	4.41	0.93	Moderate
Co-worker communication	4.30	0.82	Moderate
Corporate information	3.77	1.09	Moderate
Personal feedback	4.28	0.89	Moderate

The means and standard deviations of overall and each dimension of communication satisfaction are shown in Table 3. The subjects perceived overall communication satisfaction at a moderate level ( $\overline{X}$  = 4.19, SD = 0.41). Nurses felt they most satisfied with media quality ( $\overline{X}$  = 4.41, SD = 0.93), then co-worker communication ( $\overline{X}$  = 4.30, SD = 0.82), personal feedback ( $\overline{X}$  = 4.28, SD = 0.89),

supervisory communication ( $\overline{X}$  = 4.27, SD = 0.98), organizational integration ( $\overline{X}$  = 4.27, SD = 0.87), communication climate ( $\overline{X}$  = 4.08, SD = 0.94), and least satisfied with corporate information ( $\overline{X}$  = 3.77, SD = 1.09).

#### Part III: Organizational Effectiveness as Perceived by the Subjects

This part describes the level of organizational effectiveness as perceived by the subjects. The results are showed in Table 3.

Table 4

Means, Standard Deviations and the Level of Overall and Dimensions of

Organizational Effectiveness as Perceived by the Subjects (n = 376)

Organizational effectiveness	Mean	SD	Level
Organizational effectiveness	Wican	SD	Level
Overall organizational effectiveness	3.27	0.48	Moderate
Productivity	3.31	0.53	Moderate
Adaptablity	3.21	0.54	Moderate
Flexibility	3.39	0.62	Moderate

As shown in Table 4, nurses perceived the overall organizational effectiveness at a moderate level ( $\overline{X}=3.27$ , SD = 0.48). For each dimension, productivity ( $\overline{X}=3.31$ , SD = 0.53), adaptability ( $\overline{X}=3.21$ , SD = 0.54) and flexibility ( $\overline{X}=3.39$ , SD = 0.62) perceived by nurses are all at a moderate level.

## Part IV: Relationship Between Each Dimension of Communication Satisfaction and Organizational Effectiveness Among the Subjects

This part aimed to examine the relationship between each dimension of communication satisfaction and organizational effectiveness among nurses. Data showed non-normal distribution, thus, Spearman's rank-oder correlation coefficient was used. The results are showed in Table 4.

Table 5
Relationship between Communication Satisfaction and Organizational Effectiveness as Perceived by the Subjects (n = 376)

Organizational effectivene	
Communication Satisfaction	.51**
Communication climate	.46**
Supervisory communication	.47**
Organizational integration	.41**
Media quality	.50**
Co-worker communication	.45**
Corporate information	.34**
Personal feedback	.48**

<sup>\*\*</sup>p < .01

In Table 5, the results indicate that the correlation between communication satisfaction and organizational effectiveness is statistically significant. There was a strong positive relationship between communication satisfaction and organizational effectiveness (r = .51, p < .01). In terms of each dimension of communication satisfaction, communication climate, supervisory communication, organizational

integration, media quality, co-worker communication, corporate information, and personal feedback show a moderate positive correlation with organizational effectiveness (r = .46, p < .01; r = .47, p < .01; r = .41, p < .01; r = .50, p < .01; r = .45, p < .01; r = .48, p < .01).

#### **Discussion**

The results of this study are discussed in three parts according to the research objectives.

#### Part I: Communication Satisfaction as Perceived by the Subjects

The results of this study show that nurses in university hospitals in Kunming perceived the overall communication satisfaction at a moderate level ( $\overline{X}$  = 4.19, SD = 0.41). One possible explanation is that nurse managers pay more attention to vertical communication and horizontal communication among nurses since the high quality of nursing care program was started. Ongoing education and training workshop projects have been implemented to improve the nurses' interpersonal relationship and communication skills in the university hospitals.

In addition, head nurses in university hospitals have a high level of transformational leadership (Li, 2011). Head nurses check the overall nursing quality every day and give feedback to staff nurses in order to improve their work (Dong, Xing, & Chen, 2003). Head nurses and nurse managers create collaborative relationship and trust with staff nurses by communication with followers. They listen to diverse ideas of their followers. About 47.88% of the subjects stated that their

supervisor offers guidance for solving job related problems and 44.68% of the subjects reported that their supervisor is open to ideas (Appendix D). The management of department is more transparent than before. There are files or bulletins about departmental goals, policies and rules in each department where staff nurses have easy access to gain such information. Moreover, there is the handbook about the duty and responsibility of nurses for each day shift, evening shift and nigh shift.

Moreover, in recent years nurse managers have become more attentive towards team work and nurses often work as a team and they have stable working relationship, which enhance cooperation and communication. Team building has promoted communication leading to information sharing among nurses. There are mentorship programs among junior nurses and senior nurses in the hospitals. The new nurses should work with a senior nurse in each shift for at least 3 months before they work independently. Also by the Chinese collectivistic culture, people like to help each other making the junior nurses to get feedback and guidance from senior nurses.

However, the characteristic of organizational structure in Chinese public hospitals still is bureaucratic structures. Bureaucratic organizational design is heavily influenced by organizational communication and it impedes the horizontal communication abilities of people within the organization, which lead to communication failure (Johnston et al., 2007; Lewis, 2011). The rigid chain of bureaucratic structures hinder good relationship between superior and subordinate, which influenced effective communication in hospital (Lyu, 2008). Three major problems of interpersonal communication existed in the hospital including lack of

attention on communication, wrong channel, and lack of support from hospital (Lyu, 2008).

In addition, nurses are placed at the bottom of the hierarchy in the Chinese health care system, where head nurses and nurses are under control of physicians (Xianyu & Lambert, 2006), this results in limited opportunities to access communication channels available within the organization (Wilson & Laschinger, 1994). The major decisions about the vision and goals of hospital were made by hospital administrators without any communication with other staff (Ma et al., 2004). Nurses often have few opportunities to participate in hospital meeting and access to channels of communication, which impeded nurses in receiving information about their hospital.

Moreover, China is deeply influenced by collectivism and high-content culture communication. The characteristics like social circle-division, face-saving, conflict-avoidance and harmony-pursuing have a great impact on Chinese interpersonal communication (Liu, 2006). Chinese people mostly avoid saying "no" directly when talking with others because of the influence of culture and not frankly show their emotions during communication (Ma, 1992). In hospital, the channel of communication between nurse managers and nurses is mostly face to face. Nurses always are good listeners and usually would not like to report information to head nurses and nurse managers.

When considering dimensions of communication satisfaction, the results showed that the highest communication satisfaction as perceived by nurses were media quality ( $\overline{X}$  = 4.41, SD = 0.93) and co-worker communication ( $\overline{X}$  = 4.30, SD = 0.82), while the lowest communication satisfaction as perceived by nurses were

corporate information ( $\overline{X}$  = 3.77, SD = 1.09) and communication climate ( $\overline{X}$  = 4.08, SD = 0.94). The findings were same as the previous study of Mao (2010) in China and the previous studies using the same instrument but different subjects, such as Clampitt and Downs (1993) and Ramirze (2010) in America, and Gülnar (2007) in Turkey.

In this study nurses perceived media quality at the highest score ( $\overline{X}$  = 4.41, SD = 0.93). It means that nurse were more satisfied with media quality than other dimensions. Media quality reveals whether or not the tools utilized to communicate with employees are being used effectively. The findings demonstrated high percentages of scores (score 5 to score 7), which were concerned with "my supervisor trusts me" (53.19%) and "our meetings are well organized" (46.54%) (Appendix D). The possible explanation may be that with the development of science and technology, hospitals adopt new methods to transmit information. Mobile phone short message and office automation are most used in hospitals.

Corporate information perceived by nurses rated the lowest score ( $\overline{X}$  = 3.77, SD = 1.09). The findings revealed high percentages of scores (score 1 to score 3), which were concerned with "information about our organization's financial standing" (51.60%); "information about accomplishments and/or failures of the organization" (34.83%); and "Information about government action affecting my organization" (38.57%) (Appendix D). The possible explanation may be similar to the study of Ma et al. (2004) that the major decisions about vision and goals of hospital are made by hospital administrators but lack of communication with staffs.

#### Part II: Organizational Effectiveness as Perceived by the Subjects

The overall organizational effectiveness as perceived by nurses in university hospitals in Kunming was at a moderate level ( $\overline{X}$  = 3.27, SD = 0.48) in this study. The result is consistent with previous study conducted by Hser (2010) in Myanmar who developed the instrument base on Mott (1972). The result is also consistent with previous studies conducted by Zhao (2011), Cheng et al. (2010) in China, however, they used a different instrument.

One possible explanation may be that head nurses in university hospitals have a high level of transformational leadership (Li, 2011). Leadership style was positive related to organizational effectiveness (Hser, 2010) and significantly explained and predicted organizational effectiveness (Vinitwatanakhun, 1998). Sense of management has changed from task oriented to relation oriented and humanistic management in hospitals. In the department, head nurses organize staff nurses with different age and education level to work together as a team according to their competency. Head nurses understand that new nurses have high educational level but lack of working experience, while old nurses are expert in clinical work but not good at nursing research and information technology. Head nurses are good at foster collaboration and share trust by using strength of each nurse to meet the organizational goal.

Moreover, nurse directors provide more attention on fostering nurses' competency since improving the quality of nursing care programs was carried on. There is a nursing skill examination among staff nurses in each month in the hospital to enhance basic nursing care. In addition, there are lectures and training programs

held by nursing department every month, the contents includes professional knowledge, social skill, and communication skill.

However, the average daily nursing time is longer than standard, the nursing staff work was overloaded and they undertake large amount of work demands, especially writing care records and mixing drug, which effecting the work efficiency (Wang, 2009). As a result, it affects the performance of the unit. Additionally, poor work environments impact nurses' ability to provide nursing care. Majority of nurses (40.6%) were dissatisfied with work environments in Yunan Province (Liang et al., 2011).

Additionally, human resources development had effect on organizational effectiveness (Vinitwatanakhun, 1998). The reasonable distribution of nursing human resources is the key to enhance nursing management efficiency and to improve the quality of nursing care (Zhang et al., 2008). However, nursing shortage is a constant issue that cannot be overlooked in Yunnan. The population of RNs was reached 53,315 in Yunnan province and RNs were 1.15 for every 1,000 population in 2011 in Yunnan province (Ministry of Health of China, 2012). The ratio of nurses to physicians was 0.78: 1 in Yunnan and 0.85:1 in the whole country (Ministry of Health of China, 2010b). The ratio of nurse to bed in Yunnan Province was 0.34: 1 by 2010 (Health Bureau of Yunnan Province, 2010), which is lower than the national standard of 0.4:1.

Furthermore, autonomy as perceived by nurses of university hospitals in Yunnan Province was at a moderate level (Pu, 2010). Lower work autonomy for nurses where nurses are always seen as doctor's helpers (Qiao & Wang, 2010) and a

lack of autonomous decision making and input into patient care decisions lead to negative impact on nursing care.

Moreover, the findings of this study showed that only half (51.06%) of the subjects held a bachelor and a master degree (Table 2). The education level of nurses have influence on quality of nursing care, the lower education level, the lower quality of nursing care (Chen et al., 2010). The ability of providing better nursing care, communication and capacity of management among nurses who held bachelor degree was better than lower education level nurses (Yang, 2012).

In this research, the highest mean score of organizational effectiveness was flexibility ( $\overline{X}$  = 3.39, SD = 0.62), then followed by productivity ( $\overline{X}$  = 3.31, SD = 0.53), adaptability ( $\overline{X}$  = 3.21, SD = 0.54). This means that nurses perceived flexibility higher than other dimensions. The possible explanation is that nursing department provides emergency project for some emergency diseases such as SARS and H1N1. In addition, there were clinical practice guidelines and contingency plans for patient fall, transfusion reaction, conflagration and earthquake.

However, the emergency response capacity of nurses was at a low level among most tertiary hospitals in China (Wu, 2009). According to the demographic characteristics of this study, more than half of (50.26%) subjects were less than 31 years old. Young nurses are vital, easy to accept fresh things, however they lack adequate knowledge, skills and experience (Zhang et al., 2008).

In terms of adaptability, the nurses perceived the lowest score. One possible explanation may be that more than half (54.26%) of the subjects worked no more than 10 years and 76.86% of the subjects' profession title were at the primary level, 36.70% were junior nurses and 40.16% were nurse practitioners (Table 2). Less

experienced nurses may be frustrated at being unable to resolve patients' problem as well as older nurses.

Nonetheless some training programs were provided for nurses to update new knowledge and advanced technologies. The clinical nursing expert training program and the advanced practical nurse program has been widely carried out in hospitals. Nurses have the opportunity to participate in professional development and to develop their professional skills and knowledge in the hospital. In addition, nurses should share their knowledge and experience, especially those attended a refresher course, in each department.

## Part III: Relationship Between Communication Satisfaction and Organizational Effectiveness Among the Subjects

The results showed that there was a strong positive relationship between communication satisfaction and organizational effectiveness (r = .51, p < .01). The results indicated that nurses who perceived higher satisfaction with communication, perceived higher levels of organizational effectiveness.

The result is consistent with previous study conducted by Wippich (1983) in American. This finding was supported by Roberts and O'Reilly's (1973) contention that if communication was good, an organization's performance and effectiveness would also be good. According to Downs and Hazen (1977), communication satisfaction affected employee's job satisfaction. Pincus (1986) reported that communication satisfaction was positively related to job satisfaction and job performance.

When the hospital's communication is good it is more likely to make nurses identify with it or feel a vital part of it and handle conflict well. They would be able to work with more energy and dedication towards the hospital. Moreover, when nurses are motivated and stimulated, their work is best in the interest of the hospital which leads them work with enthusiasm towards growth and productivity of the hospital. Studies show that there were positive relationships between motivation and organizational effectiveness (Cheng et al., 2010; Manzoor, 2012).

In addition, when nurses were given more help and guidance to solve problems of direct patient care in their daily work by head nurses and nurse managers, it enhances their job satisfaction and job performance thereby increasing organizational effectiveness. Besides, when nurses are satisfied with the information about their job requirement, department plans, and the policies and benefits, nurses gets a sense that they have been integrated, they would know clearly about their job and daily work will be done well.

Furthermore, when nurses feel communication among them is accurate and free flowing, working with a compatible group, they might have a better understanding among themselves which forms a good relationship with physicians and other health care professionals, enhancing cooperation and building trust. Moreover, when nurses help colleagues to solve problems and share knowledge with other, they would feel valuable in their work and believe their work will be done better.

Moreover, when nurses were more likely to access to the hospital administrations and have more chances gain information about hospital's accomplishments and failures, they would feel their job became interesting and feel

valuable in their work. Once nurses received high satisfaction with the information about how their job compares with others, how they are being judged, how problems in their job are being handled, it may enhance their job satisfaction and job performance thereby increasing organizational effectiveness.

