CHAPTER 2

LITERATURE REVIEW

For this study, the literature review included the following topics:

1. Communication satisfaction

    1.1 Definitions of communication satisfaction

    1.2 Dimensions of communication satisfaction

    1.3 Measurements of communication satisfaction

    1.4 Studies related to communication satisfaction

2. Organizational effectiveness

    2.1 Definitions of organizational effectiveness

    2.2 Approach and model of organizational effectiveness

    2.3 Factors related to organizational effectiveness

    2.4 Measurements of organizational effectiveness

    2.5 Studies related to organizational effectiveness

3. Relationship between communication satisfaction and organizational effectiveness

4. Situation related to communication satisfaction and organizational effectiveness in China

Communication Satisfaction

Definitions of Communication Satisfaction

Communication satisfaction has became a relatively new area of study since Level (1959) proposed this concept. There are some articles and studies report different definitions of communication satisfaction.

Traditionally, communication satisfaction was considered to be a unitary or single dimensional construct. Level (1959) was the first person introduced communication satisfaction who defined communication satisfaction as how employee's perceived the total communication climate. Hecht (1978) defined communication satisfaction as the support provided when a communication event fulfills positive expectations. Thayer (1986) defined communication satisfaction as the personal satisfaction inherent in successfully communicating to someone or in successfully being communicated with. Kandlousi, Ali, and Abdollahi (2010) defined communication satisfaction as the level of satisfaction an employee has between the overall communication flow and relationship variables within their organization.

Redding (1972) claimed that communication satisfaction might be a multidimensional in nature. Redding (1978) reported that communication satisfaction is used to refer to the overall degree of satisfaction an employee perceives in the total communication environment. Downs and Hazen (1977) indicated that communication satisfaction is a multidimensional construct in support of Redding's (1972) claim. Based on Downs et al.'s (1973) study and Downs and Hazen's (1977) study, Crino and White (1981) defined communication satisfaction as an individual's satisfaction with various aspects such as task, feedback, and work-group relations of communication

in an organization. Among those definitions, Crino and White's (1981) definition which demonstrates all aspects of communication satisfaction was used by the researcher in this study.

Dimensions of Communication Satisfaction

Communication was an antecedent of communication satisfaction (Carriere & Bourque, 2009). There are two types of communication traditionally found within organizations, formal communication and informal communication (Zhao, 2011). Formal communication has set regulations and channels from which it flows through the hierarchy of an organization. Informal communication has no set flow, and is based on social relationships.

According to the direction of communication, it can be classed into four categories: downward communication, upward communication, lateral communication, and diagonal communication (Tomey, 2004). (1) Downward communication, communication flows from the top of the organization to the bottom and this is usually from management to the subordinate employees. (2) Upward communication, communication flows from the bottom of the organization to the top and is usually from the subordinates to management. (3) Lateral or horizontal communication, described as communication that takes place between members of a particular work group or unit, and work groups or units of the same level and hierarchical equivalent. (4) Diagonal communication occurs between individuals or departments that are not on the same level of the hierarchy.

Eight dimensions of communication satisfaction developed by Downs and Hazen (1977). Downs and Hazen (1977) identified eight dimensions of

satisfaction in relation to communication based on a study conducted in various types of organizations including military, professional, hospitals, government agencies and universities. These are communication climate, supervisory communication, organizational integration, media quality, co-worker communication, corporate information, personal feedback, and subordinate communication.

1. Communication climate reflects communication on both the organizational and personal level. It includes the extent to which communication in the organization motivates and stimulates workers to meet organizational goals and the extent to which it makes them identify with the organization. Also, it includes estimates of whether or not people's attitudes toward communicating are healthy in the organization. Organizational communication climate is seen as jointly determined by the individual worker and organizational management (Ashforth & Lee, 1990). Jones and James (1979) state that communication climate is a facet of the broader construct of psychological climate and includes communicative elements such as judgments on the receptivity of management to employee communication or the trustworthiness of information being disseminated in the organization.

2. Supervisory communication encompasses both upward and downward aspects of communicating with supervisors. It includes the extent to which superiors are viewed as listeners and how well they pay attention to employees. Miles, Patrick, and King (1996) proposed four major types of supervisory communication: positive relationship communication, upward openness communication, negative relationship communication, and job-relevant communication. Positive relationship communication focuses on supervisors seeking suggestions from subordinates, being interested in them as people, relating with them in a casual manner, and allowing them to

contribute input on important decisions. Upward openness communication is characterized by the opportunity to question a supervisor's instructions and to disagree with a supervisor. Negative relationship communication deals with supervisors' ridiculing subordinates and criticizing them in the presence of others. Job-relevant communication includes a supervisor's feedback on performance, information about rules and policies, job instructions, work assignments and schedules, and goals.

3. Organizational integration refers to the satisfaction employees have with respect to the information they receive about the organization and immediate work environment. This includes interdepartmental policies and plans, individual requirements of an individual's respective job and responsibilities, and news about co-workers and other personnel. Barki and Pinsonneault (2005) defined organizational integration as the extent to which distinct and interdependent organizational components constitute a unified whole. Six types of organizational integration are identified: two intra-organizational organizational integration (internal-operational and internal-functional) and four inter-organizational organizational integration (external-operational-forward, external-operational-backward, external-operational-lateral, and external-functional).

4. Media quality deals with the extent to which meetings are well organized, written directives are short and clear, and the degree to which the amount of communication is about right. It reveals whether or not the tools utilized to communicate with employees are being used effectively.

5. Co-worker communication concerns the extent to which horizontal and informal communication is accurate and free flowing. Some scholars viewed

co-worker communication as horizontal communication. Horizontal communication often focuses on employee satisfaction and employee morale. Horizontal communication falls into one of three categories (Canary, 2011): 1) Intradepartmental problem solving. These messages take place between members of the same department in a school or division in a school-wide organizational system and concern task accomplishment. 2) Interdepartmental coordination. Interdepartmental messages facilitate the accomplishment of joint projects or tasks in a school or divisions in a school-wide organizational system. 3) Staff advice to line departments. These messages often go from specialists in academic areas, finance, or computer service to campus-level administrators seeking help in these areas.

6. Corporate information deals with broadest kind of information about the organization as a whole. It includes notification about changes, information about the organization's financial standing, and information about the overall policies and goals of the organization.

7. Personal feedback is concerned with the workers' need to know how they are being judged and how their performance is being appraised. Feedback is the receiver's observable response(s) to a source's message. Feedback is extremely critical in all communication situations, but particularly so in interpersonal communication between manager and employee. A manager can carefully observe an employee's response to judge the success or failure of messages being sent. When feedback is negative, new messages can be constructed (Richmond, McCroskey, & McCroskey, 2005).

8. Subordinate communication focuses on upward and downward communication with subordinates. It concerns with the openness of individuals to

downward communication and their receptiveness and potentiality to send good information upward. Jablin (1979) stated that in an open communication relationship between superior and subordinate, both parties perceive the other interactant as a willing and receptive listener and refrain from responses that might be perceived as providing negative relational or disconfirming feedback. Research has shown that one-third to two-thirds of the managers' time communicating with subordinates (Jablin, 1985).

Mueller and Lee (2002) divided these eight dimensions of communication satisfaction into three categories: interpersonal, group, and organizational context. Personal feedback, supervisory communication, and subordinate communication are placed in interpersonal context of communication satisfaction (Mueller & Lee, 2002). Group context includes co-workers communication and organizational integration, corporate communication, communication climate, and media quality are situated in organizational context of communication satisfaction (Mueller & Lee, 2002).

Other dimensions of communication satisfaction. There are several concepts of communication satisfaction which have been used by previous scholars. Redding's (1972) five components and Wiio's (1976) four dimensions will be reviewed, as follows:

Redding (1972) reviewed some studies and indicated that communication satisfaction referred to a wide variety of components including: 1) being notified of changes, 2) understanding job requirements, 3) access to important information, 4) accessibility of superiors, and 5) explanation of policies.

Wiio (1976) identified four dimensions of communication satisfaction, including:1) job satisfaction, 2) message content, 3) improvements in communication, and 4) channel efficiency.

Among those dimensions, Downs and Hazen's (1977) eight dimensions of communication satisfaction contain all aspects that clearly interpret communication satisfaction. Therefore, it was rational for the researcher to use those dimensions for this study.

Measurements of Communication Satisfaction

Communication satisfaction has been measured in different ways. Based on the literature review, the following instruments were commonly used to measure communication satisfaction:

Organizational Communication Questionnaire (OCQ) developed by Roberts and O'Reilly (1974). Roberts and O'Reilly (1974) developed an instrument purportedly designed to measure organizational communication. The instrument consists of 35 questions that were categorized into 16 dimensions where employees used 7-point Likert scales to respond to items related to eight factors: 1) trust for supervisor (three items), 2) influence of supervisor (three items), 3) importance of upward mobility (two items), 4) desire for interaction (three items), 5) accuracy (three items), 6) summarization (three items), 7) gatekeeping (three items), and 8) overload (two items). Three of the dimensions consist of multi-item scales requiring the respondent to indicate percentage of time: directionality-upward (three items); directionality-downward (three items); and directionality-lateral (three items). Four of the dimensions are single-item scales requiring the respondent to indicate the

frequency (percentage of time) various modes of communication are used: written; face-to-face; telephone; and other. The last dimension consists of a single-item scale scored on a seven-point Likert format indicating the degree of satisfaction with communication in the organization. Good internal consistency has been reported in the study with alpha coefficients ranging from .79 to .88 (Roberts & O'Reilly, 1974).

Communication Satisfaction Questionnaire (CSQ) developed by Downs and Hazen (1977). The Communication Satisfaction Questionnaire (CSQ) was developed by Downs and Hazen (1977) in an attempt to discover the relationship between communication and job satisfaction. The instrument includes eight dimensions: 1) communication climate, 2) supervisory communication, 3) organizational integration, 4) media quality, 5) co-worker communication, 6) corporate information, 7) personal feedback, and 8) subordinate communication. It consists of 40 items, five items devoted to each of the eight dimensions, with a Likert-type scale ranging from very dissatisfied (1) to very satisfied (7). Reliability of the CSQ was reported at .94 (Downs & Hazen, 1977). Coefficient alpha reliabilities for the eight dimensions have been consistently high, ranging from .72 to .96 for studies in Australia (Downs, 1991). Downs and Hazen (1977) applied items validity analysis for proving instrument's validity. Results showed that items significantly differentiated between satisfied and dissatisfied.

Communication Audit Questionnaire (CAQ) developed by Downs (1990). The Communication Audit Questionnaire (CAQ) is an expansion done by Downs (1990) of the Communication Satisfaction Questionnaire that was developed by Downs & Hazen (1977). The instrument includes ten dimensions: 1) communication climate, 2) supervisory communication, 3) organizational integration, 4) media

quality, 5) co-worker communication, 6) corporate information, 7) personal feedback, and 8) subordinate communication, 9) top management communication, and 10) interdepartmental communication. The questionnaire was constructed to indicate level of satisfaction of respondents with fifty items using a 7-point scaling from 1="very dissatisfied" to 7="very satisfied".

The CSQ (Downs and Hazen, 1977) was selected for communication satisfaction construct of the study. Many findings have resulted in the CSQ being the most widely used scale when measuring communication satisfaction (Crino & White, 1981, Pincus, 1986). The researcher used seven dimensions of the CSQ because the eighth dimension, "subordinate communication", is aimed at personnel in their role as staff nurse and not nursing supervisors.

Studies Related to Communication Satisfaction

One study was found to explore communication satisfaction in hospital. Zhao (2011) constructed a research to examine the relationship between organizational communication and organizational effectiveness in a public hospital. A modified instrument (Likert scale ranged from 1 to 5) base on CSQ was used in this study. The results showed that organizational communication of the public hospital is on the moderate level ($\overline{X}$ =3.57, SD=0.65).

There were two studies were found to explore communication satisfaction in education setting. Gülnar (2007) conducted a study to explore the relationship between communication satisfaction and job satisfaction among 600 research assistants from 17 faculties in Selcuk University. The CSQ (Likert scale ranged from 0 to 10) was used. Results showed that the most satisfied communication satisfaction

factors were co-worker communication ($\overline{X}$ =5.96, SD=1.72), media quality ($\overline{X}$ =5.26, SD=2.63), and organizational integration ($\overline{X}$ =5.25, SD=1.95), the least satisfied factors were communication climate ($\overline{X}$ =4.44, SD=2.50), personal feedback ($\overline{X}$ =4.60, SD=2.42), and corporate information ($\overline{X}$ =5.04, SD=2.14). Also analysis showed that research assistants have average level satisfaction in view of the overall communication satisfaction ($\overline{X}$ =5.08, SD=1.92).

Ramirze (2010) constructed a study to explore multiple facets of communication and job satisfaction in a university foodservice setting using the CSQ (Likert scale ranged from 1 to 7). Results indicated that student employees had the highest levels of communication satisfaction ($\overline{X}$ =181.75, SD=38.24) while classified employees reported lower communication satisfaction ($\overline{X}$ =161.00, SD=35.04). Managers reported the lowest levels of communication satisfaction ($\overline{X}$ =156.17, SD=30.34) and also expressed the highest job satisfaction ($\overline{X}$ =78.66, SD=18.66).

Most of studies were conducted to explore communication satisfaction in business field. Mao (2010) constructed a study to explore the relationship among intercultural communication sensitivity, conflict management styles, technology use, and organizational communication satisfaction in multinationals in China. The CSQ (Likert scale ranged from 1 to 7) included six dimensions was used to measure communication satisfaction. Results showed that both Chinese employees with overseas experience and those without overseas experience were most satisfied with co-worker communication ($\overline{X}$ =4.76, SD=1.02; $\overline{X}$ =4.56, SD=0.99), but differed in the ranking of their satisfactory levels of other factors.

Clampitt and Downs (1993) designed a study to explore the relationship between communication and productivity in two companys. A slightly modified CSQ was used in this study. A 0-100 scale was used with 0 representing no satisfaction, 50 average satisfaction, and 100 maximum satisfaction. In the first company, the result showed that the co-worker communication ($\overline{X}$=348.7, SD=67.4) and subordinate communication ($\overline{X}$=346.7, SD=93.3) were ranked the highest. The personal feedback ($\overline{X}$=263.8, SD=106.6) was ranked last. In the second company, the supervisory communication was ranked at the most satisfaction ($\overline{X}$=377.9, SD=92.2). Personal feedback ($\overline{X}$=263.3, SD=112.3) and corporate information ($\overline{X}$=264.7, SD=123.12) were the areas of the least satisfaction.

Md Nordin et al. (2011) investigated communication satisfaction in a highway concessionaire company in Malaysia. The CSQ (Likert scale ranged from 1 to 5) was used to measure employees' perception of the organization's communication system. The results showed that organizational integration ($\overline{X}$=3.60, SD=0.67), media quality ($\overline{X}$=3.60, SD=0.67) were most satisfied. Co-worker communication ($\overline{X}$=2.99, SD=0.65) and personal feedback ($\overline{X}$=3.08, SD=0.68) were least satisfied.

In summary, most studies were conducted to examine the communication satisfaction in business field (Clampitt & Downs, 1993; Mao, 2010; Md Nordin et al., 2011) and education settings (Gülnar, 2007; Ramirze, 2010) and only one study (Zhao, 2011) in hospital. Above studies showed that mean score was most used to measure the employees' communication satisfaction. There were not any studies carried out to explore the nurses' communication satisfaction in both western countries and eastern countries.

Organization Effectiveness

Definitions of Organizational Effectiveness

Many definitions of organizational effectiveness have been reported in previous studies. Some viewed organizational effectiveness as the extent to meet organization's goal. Etzioni (1960) defined organizational effectiveness as the degree to which an organization realizes its goals. Yankey and McClellan (2003) defined organizational effectiveness as the extent to which an organization has met its stated goals and objectives and how well it performed in the process.

Organizational effectiveness also was considered as criteria. Connolly, Conlon, and Deutsch (1980) considered organizational effectiveness as a set of several statements, each reflecting the evaluative criteria applied by the various constituencies involved with the organization being evaluated with an emphasis on means criteria. Bennis (1966) described organizational effectiveness as smooth internal functioning and is assessed through criteria of internal health, such as adaptability, a strong sense of identity and the capacity to test reality.

Some viewed organizational effectiveness as the ability of a organization. Mott (1972) defined organizational effectiveness as the ability of an organization to mobilize its centers of power to produce, adapt to change, and cope with emergencies. Yuchtman and Seashore (1987) defined organizational effectiveness in terms of its bargaining position, as reflected in the ability of the organization, in either absolute or relative terms, to exploit its environment in the acquisition of scarce and valued resources and how they utilize these resources.

In this study organizational effectiveness was the ability of an organization to mobilize its centers of power for action, production and adaptation to achieve organizational goals, including productivity, adaptability and flexibility (Mott, 1972). This definition fit with the hospital context in China.

Approach and Model of Organizational Effectiveness

Organizational effectiveness has a long and messy history. Various approaches have been developed to assess it. The best known models are the goal approach, the system resource approach, the internal process approach, the multiple constituency approach and the competing values Approach.

Goal approach. The goal approach is the oldest and one of the most widely applied models in the study of organizational effectiveness. In general, the goal approach defines effectiveness as a complete or at least partial realization of the organization's goals (Etzioni, 1960; Hall, 1980). Goals are commonly accepted as part of the organizational culture, design, and structure; and the organization's purpose is generally operationalized in the form of a specific goal or set of goals. The goal approach focuses on the output to figure out the essential operating objectives like profit, innovation and finally product quality (Schermerhorn, Hunt, Osborn, & Osborn, 2004). It centers around the degree to which organizations realize output goals (such as profitability, growth, productivity).

Cameron (1986b) concluded, the goal approach to assessing organizational effectiveness applies only in those organizations that have clearly defined, time bound and precisely measurable operative goals. The limitations in determining operative

organizational goals make the academic and practical assessment of organizational effectiveness in terms of goal attainment less valuable than has been presumed.

System resource approach. Early proponents of the system approach to assessing organizational effectiveness included Etzioni (1960), Katz and Kahn (1966), and Yuchtman and Seashore (1967). The perspective taken by this group was that the effectiveness construct is best understood in terms of the entire organizational system and control within the environment. The system resource approach pays attention to the input of the figure. It explains the effectiveness from the point of view of the ability to obtain necessary resources from the environments outside the organization (Schermerhorn, Hunt, Osborn, & Osborn, 2004). The application of system resource can be effective if a vivid relation exists between the resources which an organization receives and the goods or services it produces (Cameron, 1981).

A problem of the system resource approach is that a high volume of acquired resources does not guarantee effective usage. Moreover, it is difficult to define an optimal level of resource acquisition across different organizations. Cameron (1981) stated that this approach is useful when there is a clear connection between the resources and the outputs of the organization.

Internal process approach. The approach is rooted in both the system and the human-relations models of organizations. It focuses on internal processes that increase the ability of organizations to cope with changes in the environment. The processes by which organizations articulate preferences, perceive demands and make decisions are seen as the criteria of effectiveness (Pfeffer, 1977). Organizational effectiveness is associated with the internal characteristics of the organization such as

internal functioning, information flow, trust, integrated systems and smooth functioning (Cameron, 1981; Shilbury & Moore, 2006).

The internal process approach has never been as widely discussed and applied as the goal and system resource approaches. The internal processes approach is appropriate when the internal processes and procedures are linked to the outputs (Cameron, 1981).

Multiple constituencies approach. The multiple constituency approach conceives effectiveness not as a single statement but it recognizes that organizations have multiple constituents or stakeholders who evaluate effectiveness in different ways. In a multiple constituency view, different constituencies rate a given organization in different ways (Connolly et al., 1980). It focuses not so much on characteristics of the organization but on the parties involved in assessing organizations' effectiveness. Unlike the goal and systems approaches, these approaches derive criteria for assessing effectiveness from the preferences of multiple constituencies for the outcomes of organizational performance. It likens an organization to a political arena where various participants with varying degrees of power for control over resources. Each of the constituencies has a unique set of values that requires consideration when assessing the organization's effectiveness.

Competing values approach. Quinn and Rohrbaugh (1981, 1983) have developed a competing values approach to organizational effectiveness. The competing values approach identifies two dimensions including the focus of the organization and the organizational structure. Focus refers to whether dominant values reflect issues that are internal to the organization, such as concern for employee satisfaction, morale, and efficiency of production. Organizational structure

concerns include the degree to which the organization is concerned with stability or flexibility. The competing values approach poses four possible models: 1) open systems model, 2) rational goal model, 3) internal process model, and 4) human relations model.

1. In the open systems model, external focus and flexible structure is valued and concerned with growth and resource acquisition. The identified effectiveness criteria in this model are adaptability, flexibility, growth, resource acquisition, and innovation.

2. The rational goal model emphasizes structural control and an external focus. The identified effectiveness criteria in this model are productivity, efficiency, goal attainment, task focus and performance.

3. The internal process model emphasizes internal focus and structural control. The identified effectiveness criteria in this model are stability, continuity, planning, control, information management, routinization, and formalization.

4.. The human relations model is concerned with maximizing the return on investment in human resources. The identified effectiveness criteria in this model are training, participation, empowerment, morale, and cohesion.

Model of organizational effectiveness developed by Mott (1972). Mott (1972) formulated a model of organizational effectiveness by combining several performance outcomes. This model was based on a model of organization in which closure system, the structuring of roles and groups and the relationships among them. Close-system serves as a major mediating variable between organizational characteristic and effectiveness. In Mott' model, he identified three ways in which organizations mobilize centers of power: productivity, adaptability, and flexibility.

1. Productivity refers to organizing centers of power for routine production, including quantity, quality, and efficiency. The quantity and quality of the product are important for the relative survival capacities of an organization. Efficiency refers to achievement of the greatest output for the least input.

2. Adaptability refers to organizing centers of power to change routines. He considered adaptability to be both symbolic and behavioral; that is, the plan to change and the change itself. Symbolic adaptation refers to anticipating problems in advance, developing satisfactory and timely solutions to them, and staying abreast of new technologies and methods applicable to the activities of the organization. Behavioral adaptation refers to prompt acceptance of solutions and prevalent acceptance of solutions.

3. Flexibility refers to organizing centers of power to cope with temporally unpredictable overloads of work. Flexible actions are coping strategies rather than lasting changes in organizational processes.

Model of organizational effectiveness developed by Cameron (1978). Cameron (1978) proposed a model for evaluating the organizational effectiveness in higher education. There are nine dimensions consist this model, including 1) student educational satisfaction, 2) student academic development, 3) student career development, 4) student personal development, 5) faculty and administrator employment satisfaction, 6) professional development and quality of the faculty, 7) system openness and community interaction, 8) ability to acquire resources, and 9) organizational health.

1. Student educational satisfaction. It deals with the satisfaction of students with their educational experiences at the place where they are studying.

2. Student academic development. This dimension discusses the rate and extent of achievement, growth, and progress which the students have managed to gain at the institute. It also deals with opportunities for academic development which is given to them by the institution.

3. Student career development. It indicates the range of the students' occupational and vocational progress as well as the opportunities which are given to them by the institutions.

4. Student personal development. It refers to the extent of the students' progress in non-career, non-academic areas; in fact, they are on the social, cultural, and emotional basis. The opportunities which are offered by the institutions are also within this dimension.

5. Faculty and administrator employment satisfaction. This refers to the satisfaction that the administrators and the faculty members have with their jobs.

6. Professional development and quality of the faculty. This dimension talks about the range of work achievement and improvement of the faculty members as well as the extent of motives toward work progress which the organization provides.

7. System openness and community interaction. It displays the attention which is given to interaction with the external environment of the institution, the adaptation to it and the service given in that place.

8. Ability to acquire resources. This refers to the range of resources the organization can earn from the outside. They can include faculty members and students with high-quality, political recognition and financial aid.

9. Organizational health. It refers to the level of smooth functioning of the institution from the viewpoint of its processes and operations such as good-will and liveliness of the institution.

In this study, Mott's (1972) organizational effectiveness model was used because this model focuses on productivity of the services, adaptability and flexibility. The extent to quality and quantity of nursing care and efficient health care services represent the effectiveness of hospital. Productivity, adaptability and flexibility are important for hospitals in China to improve the quality of nursing care to meet the patients' needs.

Factors Related to Organizational Effectiveness

According to the literature review, the major set of factors or variables that potentially have influence on organizational effectiveness are:

1. Organizational characteristics: Steers, Ungson, and Mowday (1985) organizational characteristics which affect the effectiveness are of two types: organizational structure and technology. Structure in terms of functional specialization, size centralization of decision making and even formalization is likely to increase productivity and efficiency. Job satisfaction of the employees is also related to the organizational structure, equitable division of work and delegation or authority and responsibility and proper direction are likely to generate the feeling of satisfaction among people at work. Technology and organizational structure are interrelated. The type of technology determines the nature and structure of organization. Mott (1972) also proposed organizational characteristics as a factor related to organizational effectiveness.

2. Environmental characteristics that include internal and external environment. The external environment is the economic, social, and political climate. The internal environment is the organization's culture and climate. Management should have experts who will suggest adjustments which are to be made in the organizational set up to comply with environmental changes (Steers et al., 1985).

3. Characteristic of the persons in the organization which consists of the organization's operation such as job motivation like job characteristics, target, needs, knowledge, ability, roles and organizational commitment (Steers et al., 1985).

4. Managerial policies and practices consists of setting the exact targets, recruitment and management of the resources, operational environment, communication, status of leaders and decision making, organization, self-adaption and new creative ideas (Steers et al., 1985).

5. Leadership style affects organizational effectiveness. Previous studies showed that leadership style was positive related to organizational effectiveness (Giri & Santra, 2008; Hser, 2010)

Measurements of Organizational Effectiveness

Organizational effectiveness has been measured in different ways. Based on the literature review, the following instruments were commonly used to measure organizational effectiveness in different settings:

Index of Perceived Organizational Effectiveness (IPOE) developed by Mott (1972). The Index of Perceived Organizational Effectiveness (IPOE) is an instrument to measure perceptions of organizational effectiveness developed by Mott (1972). This measure is derived from a questionnaire which was initially developed

for use in hospital setting from Georgopoulos and Mann' study of ten community hospital in Michigan cities and examining the characteristics of five organizations. Mott concluded that the effectiveness index resulted from using the subjective measurement of productivity, adaptability and flexibility as valid and inexpensive measure except when responses reflect outmoded standard (Mott, 1972). The instrument consists of 8 items in three dimensions: productivity, adaptability and flexibility. It is measured on 5-point Likert scale ranging from l=Low Effectiveness to 5=High Effectiveness. The Cronbach's alpha for original index is 0.89 (Miskel, Fevurly, & Stewart, 1979). According to Luthans, Welsh, and Taylor (1998) the values of Cronbach alphas for the productivity scale is .69, the adaptability scale is .69 and overall effectiveness scale is .79. More recently, the Cronbach alpha for IPOE was .87 (Mendiola, 2009). Mott (1972) determined validity of the original form of the IPOE in his research in the Office of Administration of the National Aeronautics and Space Administration, one hospital, and three additional federal sites.

Assessment of organizational structures and effectiveness in colleges and universities developed by Camereon (1978). Cameron (1978) developed an instrument to assess organizational structures and effectiveness in Colleges and Universities. He looked at 20 recent empirical studies from 1967 to 1978 from the point of view of the criteria utilized by researchers to measure organizational effectiveness. This instrument includes nine dimensions: 1) Student Educational Satisfaction, 2) Student Academic Development, 3) Student Career Development, 4) Student Personal Development, 5) Faculty and Administrator Employment Satisfaction, 6) Professional Development and Quality of Faculty, 7) Systems Openness and Community Interaction, 8) Ability to Acquire Resources, 9) Organizational

Health. The instrument consists of 57 items and rated by 7-point likert scale to measure the organizational effectiveness of schools and universities. The internal consistency reliability for each of the nine dimensions ranged from 0.83 to 0.99.

The Index of Perceived Organizational Effectiveness (IPOE) was developed by Mott (1972) by using the initial data from Georgopoulos and Mann's study of ten community hospital in Michigan cities and examining the characteristics of five organizations. The researcher used IPOE in this study, since the dimensions in this instrument can fit with the aim of present research.

Studies Related to Organizational Effectiveness

Many studies were constructed to explore the factors of organizational effectiveness.

Leadership style. Hser (2010) tested the relationship between head nurse leadership style and organizational effectiveness of general hospitals in Yangon. The findings illustrated that the level overall organizational effectiveness of general hospitals was at a moderate level ($\overline{X}$=3.49, SD=0.43).

Mendiola (2009) conducted a study to investigate district fiscal leadership and school effectiveness in small, rural Texas schools. IPOE was used to measure school organizational effectiveness in this study. The mean of perceived organizational effectiveness was 4.12 on a five-point Likert scale, with the standard deviation of 0.51.

Strategy plan. Cameron (1986a) constructed a study of 29 organizations to explore the predictors of organizational effectiveness. The result indicated that certain managerial strategies are strongly associated with high static scores and with

improving effectiveness over time. Managerial strategies, in fact, were found to be more important than structure, demographics, finances, and other factors.

Vinitwatanakhun (1998) designed a study to explore the effects of factors related to organizational effectiveness of administrators and faculty members in nursing institutes under the jurisdiction of the Ministry of University Affairs. The results showed that among eight independent variables, only four variables, leadership styles, technology, strategic planning and human resources development significantly explained and predicted organizational effectiveness.

Motivation. Cheng et al. (2010) constructed a study to explore the relationship between motivation and organizational effectiveness among nurses. The results showed that the mean of satisfaction of organizational effectiveness was 3.33, on a five-point Likert scale, with the standard deviation of 0.72. The findings of this study could be used as a reference for hospital administrators in promoting effectiveness and quality of nursing care.

Malik, Ghafoor, and Naseer (2011) tested an impact of employee's performance and employee's motivation toward organizational effectiveness. Results showed that employee performance has a positive relation with organizational effectiveness and employee motivation has also positive relation with organizational effectiveness. Moreover this study indicated that the effective organizational environment promotes the effectiveness of the organization.

Other factors such as organizational communication, employee involvement climate, and nurses' use of the principles of learning organization were also reported. Zhao (2011) conducted a research to examine the relationship between organizational communication and organizational effectiveness in a public hospital. A modified

instrument base on Quinn's Competing Values Organizational Effectiveness Instrument in 1988 was used in this study. The results showed that organizational effectiveness of the public hospital is on the moderate level ($\overline{X}$ =3.64, SD=0.83).

The relationship between employee involvement (EI) climate and organizational effectiveness was studied by Riordan, Vandenberg, and Richardson (2005). The results of this study demonstrated empirical support for the link between a perceived climate of EI and organizational effectiveness. Both employees and organizations benefit from the presence of an EI climate and in that it is associated with increased employee morale, lower turnover rates, and stronger financial performance.

The effect of nurses' use of the principles of organization on organizational effectiveness was studied with 629 professional nurses who worked in general units of nine tertiary medical hospitals in Korea (Jeong, Lee, Kim, Lee, & Kim, 2006). It was showed that there was a significant positive relationship between nurses' use of the principles of learning organization and organizational effectiveness was found out in this study.

Organizational effectiveness has been widely studying both in western and eastern countries. Many factors such as motivation, leadership style, the climate of employees and employee's performance are had an impact on organizational effectiveness. Thus, it is important to focus on the factors which effect on organizational effectiveness and to study more in order to achieve the organizational goals.

Relationship Between Communication Satisfaction and

Organizational Effectiveness

Barnard (1938) was the first to assign a central place to communication in organizational effectiveness. Since Barnard, some behavioural scientists have underlined the importance of communication in contributing to organizational effectiveness (Jain, 1976). However, the relations between communication satisfaction and organizational effectiveness have not being widely studied by scholars.

In China, only one study was found about the relationship between organizational communication and organizational effectiveness. Zhao (2011) conducted a research to examine the relationship between organizational communication and organizational effectiveness in a public hospital. The results showed that organizational communication and organizational effectiveness of the public hospital is on the moderate level, respectively. Moreover, there is a positive correlation between each dimension of organizational communication and organizational effectiveness (r between .41 to .68, p<0.05).

In Taiwan, some studies have examined the link between organizational communication and organizational effectiveness. Gao (2003) found that organizational communication is positive related to organizational effectiveness. Huang (2009) conducted a study to test relationships among elementary school principal's transformational leadership, organizational communication, and organizational effectiveness in Kaohsiung city. The findings are: 1) the level of organizational communication and organizational effectiveness are both on moderate;

2) there is a positive relationship between organizational communication and organizational effectiveness.

Wippich's (1983) constructed a study among 150 secondary and elementary school teachers, and Communication Satisfaction Questionnaire (CSQ) and Index of Perceived Organizational Effectiveness (IPOE) were used in this study. The results showed that communication satisfaction is a predictor of perceived organizational effectiveness.

Some research has been done to demonstrate that communication does have an impact on productivity (Downs, Clampitt, & Pfeiffer, 1988). Some researchers have examined the impact of supervisor-subordinate communication on productivity. Kim (1975) demonstrated that higher productivity was associated with more effective feedback about performance. Supervisors are normally responsible for such feedback.Several researchers have indicated that the effectiveness of supervisory communication is related to employee productivity (Jain, 1973; Jenkins, 1977).

Clampitt and Downs (1993) constructed a study to explore the relationship between communication and productivity. The result showed that the strongest relationships were between personal feedback and productivity ($\overline{X}$=86.5 on a 100-point scale; SD=12.6) and communication climate and productivity ($\overline{X}$=84.5; SD=15.9). The 175 respondents perceived all eight communication satisfaction factors as affecting their productivity.

In summary, a number of researches have explored the relationship that exists among communication and organizational effectiveness, or dimension of organizational effectiveness. However the relationship between communication satisfaction and organizational effectiveness in nursing cannot be found in the

published study in western and eastern countries. Moreover, there is even no research is constructed to explore organizational effectiveness in nursing in Kunming.

Situation Related to Communication Satisfaction and
Organizational Effectiveness in China

According to the Ministry of Health of China (1989), hospitals are classed into three levels based on the function and assignment of the institutions. The primary hospital serves for community population, and beds number is less than 100, and it provides disease prevention, basic medical services, health care services and rehabilitation services. The secondary hospital serves for multi-communities, and beds number is between 101 and 500, and it offers health care services, teaching and scientific research. The tertiary hospital serves for the whole country, beds number is more than 501 and it provides advanced special medical services, health care services, medical education and scientific research.

Yunnan province is located in the south-west of China. The economic condition is at a low moderate level throughout the nation and the lack of advanced technique, advanced equipment, and financial support from government. Kunming Medical University (KMU) is a multidiscipline higher medical institution in Yunnan Province which was founded in 1933. There are seven university hospitals in Kunming. University hospitals of KMU refer to health care settings which are affiliated to KMU located in Kunming, Yunnan province, the People's Republic of China. Those seven university hospitals of KMU in Kunming, including 1) the First Affiliated Hospital of KMU (1stAH), 2) the Second Affiliated Hospital of KMU (2ndAH), 3) the Third Affiliated Hospital of KMU (3rdAH), 4) the Fourth Affiliated

Hospital of KMU (4[th]AH), 5) the Affiliated Kunhua Hospital of KMU (KHH), 6) the Affiliated Yanan Hospital of KMU (YAH), and 7) the Affiliated Stomatology Hospital of KMU (SH). All the university hospitals are tertiary hospitals. There are six university hospitals which provide 24 hours service except the Affiliated Stomatology Hospital of KMU.

Recently there are new policy changes in Chinese health care system. The government provides more attention to the quality of health care. In 2010, the Demonstration Project of High Quality of Nursing Care was performed in all the tertiary hospitals in China (Ministry of Health of China, 2010b). The project states that hospitals should provide enough nursing staff, increase the time of direct nursing care and reform the nursing service pattern. In 2011, the Expanding Project of High Quality of Nursing Care was issued by Chinese Ministry of Health (Ministry of Health of China, 2011a). These two projects emphasized the importance of quality of nursing care.

Nursing human resources remain at an unsatisfactory level to meet the needs of China's vast and increasing population (People's Daily, 2006). According to the World Health Organization (WHO), in order for a health care system to run efficiently and meet the population's primary care needs, there must be a minimum of two nurses per 1,000 population. In China, a country with a population of 1.3 billion, there was only 1.66 nurse per 1,000 population in 2011 (Ministry of Health of China, 2012). With a current nursing population of approximately 1.3 million, China will need to train and employ at least 0.4 million more nurses to uphold the WHO standard and millions more to reach the standards of other developed nations.

The Ministry of Health of China reported that at the end of 2011, that there were 2.24 million nurses and 2.47 million physicians; the ration of nurses to the population was 1.66 : 1,000, and the ration of physicians to the population was 1.82 : 1,000 (Ministry of Health of China, 2012). The population of RNs 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). Comparing with the WHO's minimum standard of one nurse for every 500 population, and 4 to 5 nurses to one doctor (WHO, 2006), it showed obvious nursing shortage in Yunnan, China. The rate 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. From above data, it shows that nursing shortage is a constantly an issue that cannot be overlooked in China. This is a major factor which influences organizational effectiveness. 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).

Nursing workload was also found to be a problem affecting organizational effectiveness in health care system. The nursing staff has overload of work as they undertake too many task, especially writing care records and mixing drug, which effect the work efficiency (Wang, 2009). Nurses who work in university hospitals take double even three times workload than other types of hospitals as they were not only doing routine nursing work in the ward, but also were responsible for training and teaching nursing students (personal communication, July, 2012).

Another one barrier which impeded organizational effectiveness was low level educational attainments among nursing professions. According to the Ministry

of Health of China (2009), up to now 60.4% nurses only finished secondary nursing school education and had nursing diplomas by the end of 2005, signifying a low level of educational background. Until 2004 the academic credentials above bachelor degree are less than 1% in China. Nursing education development in Yunnan Province has decreased. There were 48.7% who had secondary nursing school degree, 43.3% nurses held college degree, 7.1% held bachelor degree and graduate degree was less than 1% (Health Bureau of Yunnan Province, 2010). The education level of nurses was positively related to quality of nursing care (Chen et al., 2010). In order to adapt to and catch up with the development of medical science, meet the needs of patients, and to improve the quality of nursing care, nurses need to improve their education level.

In terms of professional titles, the composition involves three levels including five classes. The primary level includes the junior nurse and the nurse practitioner; the middle level includes the nurse in charge; and the advanced level includes the assistant chief nurse and the chief nurse (Ministry of Health of China, 2011b). In the primary level, the junior nurse means a new nurse graduated from school and university who passed the examination and obtained the certificate of registered nurse. The requirements for nurse practitioner in the primary level are as follows: nurse with an associate degree should have five years of work experience, nurse with a diploma degree should have two years of work experience, and nurse with a bachelor' degree should have one year of work experience after their internship. If nurses have achieved these qualifications, they could apply to take the examination. They can get the certificate for the corresponding level, if they passed the examination. The applications for the middle level are presented as below: nurse

with a doctoral degree can take the examination directly, nurse with a master's degree, a bachelor's degree, diploma or associate's degree must have the respective primary level of work experience: two, four, six, and seven years. The applicant for the advanced level must present journal publications and must have the followed process as below: nurse with a doctoral degree should have two years of middle level or anterior class experience; nurse with master or a bachelor's degree should have five years of middle level or anterior class experience (Ministry of Health of China, 2011b).

More than half of the proportion of nurses was less than 34 years old (Ministry of Health of China, 2006). According to Wu (2009) the emergency response capacity of nurses was on a low level among most tertiary hospitals in China. In China, there are protocols and procedures to follow in case of emergencies like earthquake and sudden out breaks of diseases. However, young nurses are not adequately trained for these protocols.

There are some barriers impeded communications in health care system. The characteristic of organizational structure in Chinese public hospitals is bureaucratic structures. The rigid chain of bureaucratic structures leaded to the relationship between superior and subordinate becomes command and obedience, which influenced effective communication in hospital (Lyu, 2008). Three major problems of interpersonal communication existed in the hospital included lack of attention on communication, wrong channel, and lack of support from hospital (Lyu, 2008). The major decisions about vision and goals of hospital are made by hospital administrators without adequate communication with staffs (Ma, Jin, Lee, & Liu,

2004). There were rare chances for staff nurses to participate in hospital meeting. Many nurses could not attend the meetings because they are off duty.

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 do not frankly show their emotions during communication (Ma, 1992) and mostly avoid saying "no" directly when talking with others, especially talking with others who are at a high position. In upward aspect of communicating, staff nurses usually would not like to report information to head nurses and nurse managers because of the culture and the hierarchy system.

Nursing in China has not been perceived as a profession by Chinese society, and the social status of nurses is lower than physicians' (Fang, 2008). In China, the relationship between physicians and nurses were strained and poor communication between physicians and nurses (Tang & Zhu, 2006), were observed due to the lack of communication and understanding (Qi, 2011).

In summary, organizational effectiveness as perceived by nurses is not favorable. As for nursing research, neither study was conducted to assess organizational effectiveness as perceived by nurses, nor to explore the relationship between communication satisfaction and organizational effectiveness in Kunming.

Research Conceptual Framework

The conceptual framework of this study is based on dimensions of Downs and Hazen, together with concepts of Mott. Communication satisfaction is based on Downs and Hazen (1977) dimensions and organizational effectiveness is based on Mott (1972) organizational effectiveness model. Communication satisfaction refers to an individual's satisfaction with various aspects of communication in his organization. It includes communication climate, supervisory communication, organizational integration, media quality, co-worker communication, corporate information, personal feedback, and subordinates communication eight dimensions. Organizational effectiveness is the ability of an organization to organize their power for production, and to cope with changes that happened in external and internal environment in order to accomplish an organizational goal and consisted of productivity, adaptability, and flexibility. Communication is one of the key factors of organizational effectiveness. From literature review, there was found relationship between communication satisfaction and organizational effectiveness (Wippich, 1983). Employees feel more satisfaction with communication can enhance organizational effectiveness. The relationship between communication satisfaction and organizational effectiveness was tested in the present study.