

CHAPTER 3

RESEARCH METHODOLOGY

Introduction

The purpose of this study is to understand the relationship between job satisfaction, commitment between nurses and their respective organizations (organizational commitment, affective commitment), corporate ethical value, perceived organizational support, and professional nurses demographic(age, education, tenure, work experience, marital status, and income).The specific interest of this study lay in the potential moderating effect on job satisfaction and commitment between nurses and their respective organizations (organizational commitment, affective commitment) of corporate ethical values, perceived organizational support, and demographics on the professional nurses in public hospitals in southern Thailand (see Figure 5). The remaining two sections in this chapter provide details about the participants and organizations that were involved in this study. The methodology section is divided into 4 parts: (1) research questions, (2) the research model and hypotheses, (3) the questionnaire and its variables, and (4) the development of the methodology to fit research model. It is divided further into 7 parts: (1) content validity, (2) reliability, (3) measurement of variables, (4) demographics of professional nurses (5) pilot study, (6) the

sampling, including the sample population, sample size, sampling method, and data collection, (7) method of data analysis.

Research Design

The study applies a quantitative approach, using a self-administered questionnaire to examine the attitudes of professional nurses toward job satisfaction, commitment between nurses and their respective organizations, corporate ethical values, and perceived organizational support. Data pertaining to demographic variables were also collected from professional nurses. The primary objective was to evaluate five variables: Job satisfaction, and commitment between nurses and their respective organizations (organizational commitment and affective commitment), corporate ethical values, and perceived organizational support. The area of observation for this research consisted of professional nurses working in a public hospital in southern Thailand. The main points of focus were an individual's characteristics, such as age, education, job tenure, work experience, marital status, and income, as well as individual attitudes pertaining to job satisfaction, and commitment between nurses and their respective organizations (organizational commitment and affective commitment), corporate ethical values, and perceived organizational support.

Methodology

Research Questions

The study of job satisfaction among professional nurses is likely to be affected by their demography and this may influence the relationship between job satisfaction, commitment between nurses and their respective organizations, and corporate ethical values. This study is based on the statement of the problem, and the stated purpose of study. Thus, the following research questions were explored:

Research question 1: What is the relationship between job satisfaction and commitment between nurses and their respective organizations?

Research question 2: What is the relationship between Corporate Ethical Values (CEV) and Job Satisfaction (JS): under Perceived Conditions of Organizational Support (POS), which is partially mediated by the link between Corporate Ethical Values (CEV) and Job Satisfaction (JS)?

Research question 3: What is the relationship between Corporate Ethical Values (CEV) and commitment between nurses and their respective organizations (CO)?

Research Model and Hypotheses

The model pertaining to Corporate ethical values, Perceived organizational support, Job Satisfaction, and Commitment between nurses and their respective Organizations Model (CPJSCOM) indicates that when

corporate bodies support ethical values in relation to a shortage of professional nursing staff, it not only increases job satisfaction, but also increases professional nurses' intention to stay on in the organization. If there is evidence of a positive relationship between corporate ethical values and job satisfaction and commitment to their respective organizations in professional nurses in southern Thailand, then there will be an increase in job satisfaction and intention to stay on the part of professional nurses. Thus, the researcher applied these models to study professional nurses in the south of Thailand. The researcher adopted demographic variables that show a significant relationship with professional nurses' job satisfaction and commitment between nurses and their respective organizations. The investigation from the literature review found that there is a significant relationship between demographic variables (such as age, education, tenure, marital status, work experience, and income) with job satisfaction, commitment by nurses to their respective organizations, and corporate ethical values. Certain demographic variables have a relationship with job satisfaction, namely the relationship age, job tenure, work experience, and educational level, which with affective commitment, but only age and job tenure are correlated with organizational commitment. Only age, however has a relationship with corporate ethical values. Thus, demographic variables have an effect on professional nurses' job satisfaction potentially producing an increasingly high level of commitment to the organization and intention to stay in their organization. The relationship of the CPJSCOM to demographic variables is clearly shown in figure 6. In terms of the demographics of professional nurses, the CPJSCOM indicates

that, in relation to professional nurses, corporate support and ethical values can contribute to solving the shortage of professional nurses, not only by increasing job satisfaction, but also by increasing professional nurses' intention to stay in the organization within the different groups of professional nurses with regard to such variables as age, education, tenure, marital status, work experience, and income.

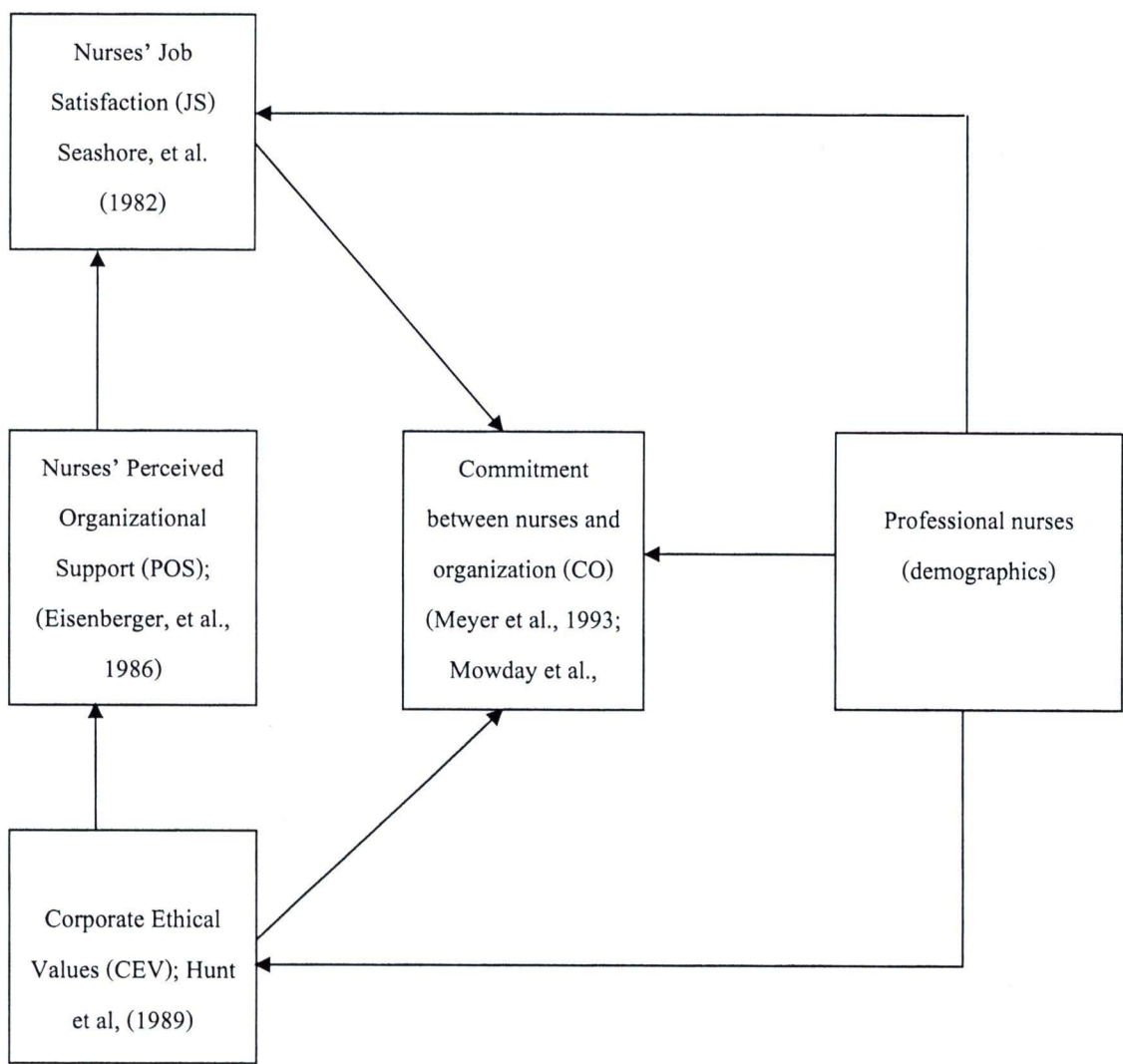


Figure 6 Corporate ethical values and Perceived organizational support and Job Satisfaction, Commitment between nurses and Organization Model (CPJSCOM) and professional nurses demographic variable.

From this, it is possible to develop the conceptual model into one in which demographic variables can also be explored in relation to the other elements of the model. To do this, a number of hypotheses arise that can be tested given an appropriate measuring instrument.

The demographic variables that have been referred to have been discussed in chapter 2. This leads to a revision of figure 6 that explores the possible relationships set up as a hypothesis, between a number of demographic variables and the conceptualizations of the research model. This revised model is presented in figure 7

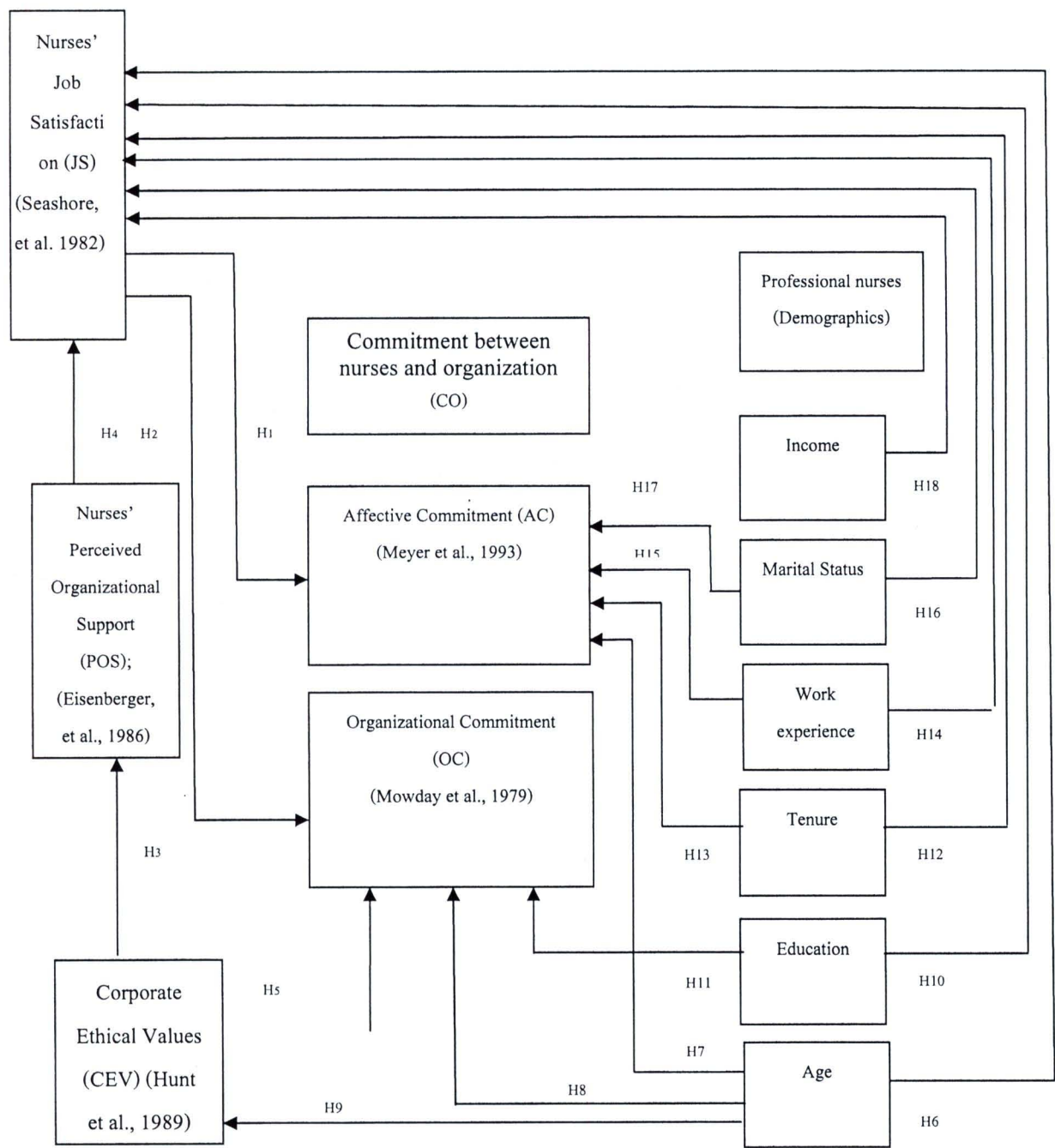


Figure 7 CPJSCOM and The professional nurses demographics: Shows the relationship, and the resulting hypothesis, between corporate ethical values, perceived organizational support, commitment between nurses and their organization (organizational commitment and affective commitment), and job satisfaction, within the context of professional nursing (with demographics including age, education, tenure, work experience, marital status, and income).

Before discussing the hypothesis, there is some literature relating to figure 7 that could be usefully explored. For instance, the first research questions refer to the Seashore et al., (1982) instrument that is used to assess overall job satisfaction. Also relevant are the studies by Mowday et al. (1979) and Meyer et al.(1993). These studies enabled the development of the research model in figure 7 and show the relationship between job satisfaction and commitment between nurses and their respective organizations (organizational commitment and affective commitment). In the study by Sinan et al. (2007) the results of the correlation analysis of healthcare employees (nurses, paramedical professionals, and non-clinical personnel), reveal a positive relationship between job satisfaction and organizational commitment. In addition, in the study by Hui et al. (2008) the results of the correlation analysis support a positive relationship between job satisfaction and organizational commitment. In addition, in the study by Wu and Norman (2006) of 75 nursing students in their final year, the results of the correlation analysis supported the positive relationship between job satisfaction and organizational commitment. In addition, Al-Aameri's correlation analysis of registered nurses in Saudi Arabia (2000) supported a relationship between job satisfaction and organizational commitment.

In addition, in Lawrence and William's study of the relationship between job satisfaction and affective commitment (2007), the results of the correlation analysis supported a positive relationship between job satisfaction and affective commitment. Similarly, Ishara and Anton (2007) correlation analysis demonstrated support for a positive relationship between job

satisfaction and affective commitment. In addition, in a study by Munevver (2006), the results of the correlation analysis provided supporting evidence for a positive relationship between job satisfaction and affective commitment.

Thus, in this research, the correlation between job satisfaction and organizational commitment and affective commitment is explored in hypothesis 1 and 2.

Hypothesis 1: A positive relationship exists between job satisfaction and organizational commitment.

Hypothesis 2: A positive relationship exists between job satisfaction and affective commitment.

The second question relates to Hunt's instrument for measuring corporate ethical values. Of relevance in this regard is the study by Eisenberger et al., (1986). This instrument measures perceived organizational support and uses the instrument developed by Seashore et al. (1982) to measure job satisfaction. These studies enabled the creation of the research model in figure 7 that shows an exploration of the relationship between corporate ethical values and job satisfaction: Under conditions of perceived organizational support and a partially mediated link between corporate ethical values and job satisfaction.

Thus, this researcher proposed studying the relationship between corporate ethical value and job satisfaction as mediated by perceived organizational support and corporate ethical values and job satisfaction. This study partly follows Valentine et al. (2006), who found evidence supporting a positive relationship between corporate ethical values and perceived

organizational support. In the present study, the researcher explores whether there is a positive relationship between corporate ethical value and perceived organizational support.

Lori and Christina (2007) found a positive relationship between perceived organizational support and job satisfaction. This study follows that of June et al. (2007), who found a relationship between perceived organizational support and job satisfaction. In the present study, the hypothesis that there is a positive relationship between perceived organizational support and job satisfaction is explored. Thus, in this research the correlation between corporate ethical values and perceived organizational support and job satisfaction is explored in hypothesis 3 and 4.

Hypothesis 3: A positive relationship exists between corporate ethical values and perceived organizational support.

Hypothesis 4: A positive relationship exists between perceived organizational support and job satisfaction.

The third question relates to Hunt's instrument for measuring corporate ethical values. Of relevance in this regard is the instrument developed by Mowday et al. (1979) to measure organizational commitment. These studies enabled the current researcher to develop the research model shown in figure 7 that explores corporate ethical values and commitment between nurses and their organization (organization commitment). In the study by Michalski (2005), the results of the correlation analysis revealed a positive relationship between corporate ethical values and organizational commitment. Thus, the

correlation between corporate ethical values and organization commitment is explored in hypothesis 5

Hypothesis 5: A positive relationship exists between corporate ethical values and organizational commitment.

The fourth part of the research studies the relationship between professional nurses demographic variables and job satisfaction; corporate ethical values; commitment between nurses and their respective organizations, including organizational commitment and affective commitment. Thus, the correlation between demographics and job satisfaction, corporate ethical values, organizational commitment and affective commitment is explored in hypotheses 6 to 18.

The first demographic variable is age, which bears a strong relationship with job satisfaction (Jennifer et al., 2008), with affective commitment (Jennifer et al., 2008; Haluk, 2008; Thomas & Daniel, 2008), strong with organizational commitment (Jeffrey & Rajan, 2005), and strong relationship with corporate ethical value (Michalski, 2005). These studies enabled the creation of the research model in figure 7 that shows the relationship between age and job satisfaction; affective commitment; organizational commitment; and corporate ethical values. Thus, in this study the statistically significant relationships between age and job satisfaction, organization commitment, affective commitment, and corporate ethical values will be explored in hypotheses 6 to 9.

Hypothesis 6: There is a significant relationship between age and job satisfaction.

Hypothesis 7: There is a significant relationship between age and affective commitment.

Hypothesis 8: There is a significant relationship between age and organizational commitment.

Hypothesis 9: There is a significant relationship between age and corporate ethical values.

The second demographic variable is education, which bears a strong relationship with job satisfaction (Joseph, 2005), and a strong relationship with organizational commitment (Jeffrey & Rajan, 2005). These studies enabled the current researcher to develop the research model shown in figure 7 that demonstrates the relationship between education and job satisfaction; organizational commitment. Thus, the statistically significant relationships between education, job satisfaction, and organizational commitment, will be explored in hypotheses 10 to 11.

Hypothesis 10: There is a significant relationship between education and job satisfaction.

Hypothesis 11: There is a significant relationship between education and organizational commitment.

The third demographic variable is tenure, which has a strong relationship with job satisfaction (Chen, 2005), and is also correlated with affective commitment (Olivier & Karim, 2007). These studies enabled the current researcher to develop the research model shown in figure 7 that show the relationship between tenure, job satisfaction, and affective commitment.

Thus the correlation between tenure and job satisfaction, as well as affective commitment, will be explored in hypotheses 12 to 13.

Hypothesis 12: There is a significant relationship between tenure and job satisfaction.

Hypothesis 13: There is a significant relationship between tenure and affective commitment.

The fourth demographic variable is work experience, which has a strong relationship with job satisfaction (Marianne, 2008; Dawal et al., 2009), as well as a relationship with affective commitment (Thomas & Daniel, 2008). These studies enabled the current researcher to develop the research model shown in figure 7 that show the relationship between work experience and job satisfaction; affective commitment. Thus, the correlation between work experience, job satisfaction, and affective commitment, will be explore in hypotheses 14 to 15.

Hypothesis 14: There is a significant relationship between work experience and job satisfaction.

Hypothesis 15: There is a significant relationship between work experience and affective commitment.

The fifth demographic variable is marital status, which has a strong relationship with job satisfaction (Chi-Ming et al., 2005; Maureen et al., 2008; Naser et al., 2009), and is also correlated with affective commitment (Therese & Steve, 2006). These studies enabled the current researcher to develop the research model shown in figure 7 that demonstrates the relationship between marital status, job satisfaction, and affective commitment. Thus, the

correlation between marital status, job satisfaction, and affective commitment, will be explored in hypotheses 16 to 17.

Hypothesis 16: There is a significant relationship between marital status and job satisfaction.

Hypothesis 17: There is a significant relationship between marital status and affective commitment.

The final demographic variable is income, which bears a strong relationship with job satisfaction (Joseph, 2005). These studies enabled the current researcher to develop the research model shown in figure 7 that demonstrates the relationship between income and job satisfaction. Thus, the correlation between income and job satisfaction will be explored in hypothesis 18.

Hypothesis 18: There is a significant relationship between income and job satisfaction.

The Questionnaire and its Variables

The questionnaire arises directly from the research questions and the hypothesis. The main concepts used are as follows: Commitment between nurses and the organization for which they work corporate ethical values, perceived organizational support, job satisfaction and intention to stay. Intention to stay is a proxy term for burnout but is also a reflection of continued commitment and loyalty. The standard questionnaires were adapted and translated into Thai and retranslated into English with the help of

porforms from Rajabhat Phuket University. The standard questionnaires have been validated by a number of scholars.

In this study, the variables to be measured include job satisfaction, commitment between nurses and the organization for which they work, corporate ethical value, perceived organizational support, and demographic variables pertaining to professional nurses. The first variable to be measured was job satisfaction.

Job Satisfaction: This is the “degree to which people like their jobs” (Spector, 1997), and pertains to professional nurses in public hospitals in the south of Thailand.

The survey instrument to measure job satisfaction was developed by Seashore et al. (1982) to capture overall job satisfaction by determining whether: (1) employees like their job, (2) employees are satisfied with their job.

The second variable to be measured was the commitment between employees and their respective organizations, which was done by using the instruments developed by Mowday et al. (1979) and Meyer et al. (1993). In this study, commitment between nurses and the organization that employed them was studied in reference to professional nurses in public hospitals in the south of Thailand. Commitment between nurses and their organization includes organizational commitment and affective commitment.

Organizational Commitment: This reflects the degree to which an individual professional nurse in a public hospital in the south of Thailand is emotionally attached to the organization and identifies with its goals. There

are three major levels of commitment between employees and their respective organizations, namely: (1) a strong belief in and acceptance of the organization' goals and values; (2) a willingness to exert considerable effort on behalf of the organization; (3) a strong desire to maintain membership in the organization. There are three factors in this regard, namely identification with, involvement in, and the loyalty of employees to, their organization (Mowday et al., 1979).

Affective Commitment: Professional nurses in a public hospital in the south of Thailand who stay with and show a strong commitment to their organization do so not only because they need the job, but also because they want it (Meyer et al., 1993).

The third variable was corporate ethical values, which was measured by the instrument developed by Hunt et al. (1989). Corporate Ethical Values are "a composite of the individual ethical values of managers and both the formal and informal policies on ethics of the organization" (Hunt et al., 1989).

Hunt and his associates identified three broad-based perceptions: (1) the extent to which employees perceived that managers act ethically in their organization; (2) the extent to which employees perceived that managers are concerned about the issue of ethics in their organization, and (3) the extent to which employees perceived that ethical behavior is rewarded (punished) in their organization.

The fourth variable was perceived organizational support, which was measured by the instrument developed by Eisenberger et al. (1986).

Perceived Organizational Support in this study involves the employees' global beliefs concerning the extent to which the organization values their contribution and cares about their well-being (Eisenberger et al., 1986).

Eisenberger and his associates identified three basic components of perceived organizational support: Organizational rewards, procedural justice, and supervisor support (Eisenberger et al., 1986).

The fifth variable to be measured consisted of the demographic variables of professional nurses, namely age, education, tenure, work experience, marital status, and income.

For the five variable of this study, the researcher designed the conceptual framework and hypotheses as follows:

The first of the independent variables to be measured is the demographics of professional nurses (age, education, tenure, work experience, marital status, and income). The dependent variables to be measured are corporate ethical values, perceived organizational support, job satisfaction, and commitment between nurses and organization. In figure 7, hypothesis six through eighteen, shows the different effect of demographic variables on the overall satisfaction of professional nurses with their jobs, as well as the influence of identification, involvement, loyalty, and intention to stay in the organization on the part of professional nurses. In addition, it will show the different effect of demographic variables has on perceived managerial ethics and perceived managerial ethical support on the part of professional nurses. Figure 7 is the research model showing the relationships of these variables and the relevant hypotheses.

The second of the independent variable to be measured is corporate ethical values. The dependent variables to be measured are job satisfaction; perceived organizational support, and commitment between nurses and the organization that employs them. In figure 7, hypothesis three and four show that their perception of managers' ethics and perceived ethical support leads to job satisfaction on the part of professional nurses. Hypothesis five shows that nurses' perception of managers' ethics and perceived managerial support in this regard lead to the professional nurses' identification with, involvement in, and loyalty to, their organization.

The final independent variable to be measured is job satisfaction. The dependent variable to be measured is commitment between nurses and the organization for which they work. In figure 7, hypothesis one and two show that professional nurses demonstrate overall satisfaction with their job, which in turn affects their professional identification with, involvement in, loyalty to, and intention to stay with the organization. Figure 7 is the research model showing the relationships of these variables and the relevant hypothesis.

Developing the Methodology to Fit the Research Model

The research model in figure 7 shows how the methodology was adapted to the research model. This research adds demographic data to the model as follows:

Firstly, in order to test hypothesis 3, correlation analysis was used to study the influence of corporate ethical values on job satisfaction, and to test

hypothesis 5, it was used to study the effect on organizational commitment. In the literature review, the researcher found that of Valentine et al. (2006) attempted to find the relationship between corporate ethical values and perceived organizational support in 460 accounting and finance professionals. This research applies the instrument developed by Hunt et al. (1989) to test corporate ethical values and applied instrument developed Eisenberg et al. (1986) to test perceived organizational support. According to the statistics and correlations results, the corporate ethical values construct was positively related to perceived organizational support and job satisfaction. The research model in figure 7 is linked to hypothesis 3, and shows that corporate ethical values have an effect on perceived organizational support. Thus, when hospital administrators support ethical values, it has an effect on professional nurses' perceived ethical values and leads to the perception that the organizational support consists of three components of well-being: (1) organizational rewards, (2) procedural justice, and (3) supervisor support. In addition, the study of Michalski (2005) found the relationship between corporate ethical values and organizational commitment on professional nurses working in hospitals. This research applies the instrument developed by Hunt et al. (1989) to test corporate ethical values and applied instrument developed by Mowday et al. (1979) to test organizational commitment. The result of research found that a positive relationship between corporate ethical values and organizational commitment. Thus, hospital administrators are necessary in this regard and provide valuable information to address the current nursing shortage facing this nation. These research models in figure 7,

linked to hypothesis 5, show that corporate ethical values have an effect on organizational commitment. Thus, when hospital administrators support ethical values, it has an effect on professional nurses in terms of a high level of commitment with regard to the following: (1) a strong belief in and acceptance of the organization's goals and values, (2) a willingness to exert considerable effort on behalf of the organization, and (3) a strong desire to maintain membership in the organization.

Secondly, to test hypothesis 4, correlation analysis was used to study the influence of perceived ethical values on job satisfaction. As a result, the researcher found that Valentine et al. (2006) had attempted to find the relationship between corporate ethical values and perceived organizational support in 460 accounting and finance professionals. Accordingly, this research applies the instrument developed by Hunt et al. (1989) to test corporate ethical values and the instrument developed by Eisenberg et al. (1986) to test perceived organizational support. The analysis found that the relationship between corporate ethical values and job satisfaction as mediated by perceived organizational support. This research model in figure 7, linked to hypothesis 4, shows that perceived organizational support influences job satisfaction. Thus, when hospital administrators support the three components of well-being; (1) organizational rewards, (2) procedural justice, and (3) supervisor support, it leads to overall job satisfaction on the part of professional nurses.

Thirdly, to test hypothesis 1 and 2, correlation analysis was used to study the influence of job satisfaction on the commitment between nurses and

the organization that employs them (organizational commitment and affective commitment). The researcher found that Al-Aameri (2000), in his study of registered nurses in Saudi Arabia, found a strong positive correlation between job satisfaction and organizational commitment. Also the work of Lawrence and William (2007) examined the relationship between job satisfaction and affective commitment in auditors engaged in public accounting. The data was collected from auditors in 130 regional and 312 large firms, for a total sample size of 442, of which 334 responses were usable. He applied instrument to measure job satisfaction and Meyer and Allen's instrument (1997) to measure affective and continuance commitment. Using correlations analysis, the results of the research found job satisfaction was significant and related in a positive way to affective commitment. This research model in figure 7, linked to hypothesis 1 and 2, demonstrates that job satisfaction has an effect on commitment between nurses and the organization for which they work (organizational commitment and affective commitment). Thus, when professional nurses' overall job satisfaction has an effect on professional nurses with regard to a high level of commitment in the following aspects: (1) a strong belief in an acceptance of the organization's goals and values, (2) a willingness to exert considerable effort on behalf of the organization, and (3) a strong desire to maintain membership in the organization, it also produces a willingness to work, and the intention to stay with, this organization.

Fourthly, this research explains how nurses' profiles may be a factor that affects the research model. The profiles of professional nurses in this

study included such factors as age, education level, job tenure, work experience, marital status, and income that affect the research model. With regard to hypotheses 6 to 18, One-Way Analysis of Variance (ANOVA) was used to study the significant factors affecting corporate ethical values, job satisfaction, and commitment between nurses and the organization for which they worked (organizational commitment and affective commitment). The researcher found that Jennifer et al. (2008) had found a strong correlation between age and job satisfaction, and between age and affective commitment (Jennifer et al., 2008; Haluk, 2008; Thomas & Daniel, 2008). Others had also found a strong correlation with organizational commitment (Jeffrey & Rajan, 2005), and with corporate ethical value (Michalski, 2005), which is shown in figure 7 in relation to hypotheses 6 to 9. Thus, age has a significant effect on the way professional nurses view the perceived ethical values of the organization, while age has a significant effect on professional nurses' high level of commitment in terms of 1) a strong belief in and acceptance of the organization's goals and values, (2) a willingness to exert considerable effort on behalf of the organization, and (3) a strong desire to maintain membership in the organization, as well as their willingness to work in, and their intention to stay on in this organization. Also age has a significant effect on overall job satisfaction.

As discussed in the review of literature, Joseph (2005) indicates that education has a strong correlation with job satisfaction, while Jeffrey and Rajan (2005) found there was a strong correlation between education and organizational commitment, as seen in figure 7 relating to hypothesis 10 and

11. Thus, the level of education has a significant effect on overall job satisfaction, as well as on the high level of commitment on the part of professional nurses in terms of 1) a strong belief in and acceptance of the organization's goals and values, (2) a willingness to exert considerable effort on behalf of the organization, and (3) a strong desire to maintain membership in the organization.

Chen (2005) found that job tenure had a strong correlation with job satisfaction, Olivier and Karim (2007) found it had a strong correlation with affective commitment. Marianne (2008) found that work experience had a strong correlation with job satisfaction, while Thomas and Daniel (2008) found that work experience showed a correlation with affective commitment. On the other hand, Chi-Ming et al. (2005) found that marital status had a strong correlation with job satisfaction, while Therese and Steve (2006) found that it had a strong correlation with affective commitment, as shown in figure 7 relating to hypotheses 12 to 17. Thus, job tenure, work experience, and marital status have a significant effect on professional nurses' overall satisfaction with their job, while their level of education has a significant effect on their willingness to work in, and their intention to stay on with, this organization.

Joseph (2005) found that income has a strong correlation with job satisfaction, as seen in figure 7, which is linked to hypothesis 18. Thus, income has a significant effect on the overall satisfaction of professional nurses with their job.

Finally, correlation analysis found that ethical values and perceived organizational support have an influence on job satisfaction and organizational commitment. Also, job satisfaction has an influential effect on the commitment between nurses and their respective organizations. One-Way Analysis of Variance (ANOVA) found that professional demographic profiling has a significant effect on corporate ethical values, job satisfaction, and commitment to one's organization.

Method

Content Validity

The adapted questionnaire was tested for content validity and reliability, important concepts in using such a tool. Pilot and Hungler (1999, p. 717) define validity as the “degree to which an instrument measures what it is intended to measure”, while content validity is defined as “the degree to which the items in an instrument adequately represent the universe of content” (Pilot & Hungler, 1999, p. 689). There are several approaches to measuring the validity of an instrument, such as content validity and construct validity. This study focuses on content validity. Polit, Beck, and Hungler (2001, p. 309) define content validity as “. . . concerned with adequacy of coverage of the content area being measured and necessarily based on judgment”. The content validity of the instruments in this study was examined by many researchers such as Assessment Questionnaires (MOAQ) - Job Satisfaction Subscale (JSS) (Seashore et al., 1982, Stoney & Maureen, 2005; Thomas &

Susanna 2006; Valentine et al. 2006), Organizational commitment questionnaire (OCQ) (Mowday et al., 1979; Michalski, 2005; Sinan et al., 2007), Affective Commitment Questionnaire (ACQ) (Helena & Praveen, 2006; Meyer et al., 1993; Victoria, 2006), Corporate Ethical Values Questionnaire (CEVQ) (Hunt et al., 1989; Michalski, 2005; Valentine et al., 2006), Perceived Organizational Support Questionnaire (POSQ) (Eisenberger et al., 1986; Lynne & Therese, 2009; Yuwen, 2009). As this study was conducted in Thailand, the instruments were checked by specialists in this area, such as professional nurses with long experience in the field of nursing, and by a professor specializing in the field of management. These specialists examined the instrument in terms of clear wording of questions suitable for Thai culture, relevant to the objective of the study, and comprehensiveness of question

Reliability

Pilot and Hungler (1999, p. 411) defined the reliability of an instrument as “the consistency with which it measures the attribute it is supposed to be measure”. The advantage of the internal consistency approach is not only that it is economical, but also that it is the best means of assessing one of the most important sources of measurement error in psychosocial instruments (Pilot & Hungler, 1999). Thus, in this research, the focus is on the internal consistency procedures for examining the instruments to be used in this study.

The researcher calculated the internal consistency reliability (Cronbach's Alpha) for each component of the instrument (the five component of the instruments being job satisfaction, organizational commitment, affective commitment, corporate ethical values, and perceived organizational support). The Cronbach's Alpha coefficients for the pilot and the final study are given below:

1. The job satisfaction scale (3 items) indicated an alpha coefficient of .808.
2. The organizational commitment scale (9 items) indicated an alpha coefficient of .816.
3. The affective commitment scale (6 items) indicated an alpha coefficient of .866.
4. The corporate ethical value scale (5 items) indicate alpha coefficient of .808.
5. The perceived organizational support scale (8 items) indicated an alpha coefficient of .920.

Measurement of Variables

Job satisfaction was measured by the Michigan Organizational Assessment Questionnaires (MOAQ)-Job Satisfaction Subscale (JSS). The MOAQ-JSS, developed by Seashore et al. (1982), is a Likert-type instrument made up of a 3-item scale that was used to assess overall job satisfaction. In a study conducted by Wayne et al. (1999), the reliability estimate for the 3-item

MOAQ-JSS was 0.67. A study conducted by Thomas and Susanna (2006), found that the level of reliability for the 3-item of MOAQ-JSS very high (Cronbach alpha = 0.91), although Stoney and Maureen (2005), found the reliability to be only moderate (Cronbach alpha = 0.62). Valentine et al. (2006), on the other hand, found the level of reliability of the MOAQ-JSS to be very high (Cronbach alpha = 0.85). Lena et al. (2009), found the reliability for 3-item of MOAQ-JSS was very high (Cronbach alpha = 0.845). This 3-item MOAQ-JSS utilizes a 5-point Likert scale that consists of the following options: strongly agree, disagree, neither disagree or nor agree, agree, strongly agree.

Commitment in this study refers to organizational commitment and affective commitment.

Organizational commitment was measured with an Organizational Commitment Questionnaire (OCQ), a Likert-type instrument made up of a 15-item scale that assesses the three commitment factors of goals and values, effort, and membership (Mowday et al., 1979). In the nursing field, the researchers use a reduced version of the organizational commitment questionnaire (OCQ) developed by Mowday et al. (1979). In a study in the field of nursing conducted by Michalski (2005), the reliability coefficient (Alpha) of organizational commitment with a 9-item scale was 0.9001. Sinan et al. (2007) found the reliability coefficient (Alpha) of organizational commitment with a 9-item scale equal to 0.9. This study used the 9-item organizational commitment questionnaire, utilizing a 5-point Likert scale that

consisted of the following options: Strongly disagree, disagree, neither disagree or nor agree, agree, strongly agree.

Affective Commitment was measured through an organizational commitment questionnaire (AFQ). This scale comprises 18 items, six for each of three commitments (affective normative, and continuance commitment). This study used only Affective Commitment Questionnaire to measure employees' emotional attachment to, identification with, and involvement in the organization. The Meyer et al. (1993) modified version of Allen & Meyer's instrument (1990), contains three commitment questionnaires (affective normative, and continuance commitment questionnaires). The affective questionnaire includes 6 items. Victoria (2006), found the reliability for each item of the three sub-scales (affective normative, and continuance commitment scale) to be high (the Cronbach Alpha ranged from .75 to .87). Helena and Praveen (2006), found that the reliability for the 6-item affective commitment questionnaire (ACQ) was high (Cronbach alpha = 0.77). These studies used a 6-item affective commitment questionnaire (ACQ), u\together with a 5-point Likert scale that consists of the following options: Strongly disagree, disagree, neither disagree or nor agree, agree, strongly agree.

Corporate Ethical Values was measured with Corporate Ethical Values Questionnaire (CEVQ). The CEVQ developed by Hunt et al. (1989). The Corporate Ethical Values questionnaire uses a 5-item Likert scale that assesses three broad-based perceptions of corporate ethical values: (1) the extent to which employees perceived that managers are acting ethically in their organization, (2) the extent to which employees perceived that managers

are concerned about the issues of ethics in their organization, (3) the extent to which employees perceived that ethical (unethical) behavior is rewarded (punished) in their organization. In a study in the field of nursing conducted by Michalski (2005), the researcher found the reliability coefficients (Alpha) of organizational commitment with 5 items equal to 0.8004. Valentine et al. (2006) found that the reliability for the 5-item questionnaire on corporate ethical values was very high (Cronbach alpha = 0.86). These studies used a 5-item corporate ethical questionnaire (CEVQ), utilizing a 5-point Likert scale that consists of the following options: Strongly disagree, disagree, neither disagree or nor agree, agree, strongly agree.

Perceived organizational support was measured using a Perceived Organizational Support Questionnaire (POSQ) developed by Eisenberger et al. (1986). The POSQ is a Likert instrument made up of an 8-item scale for assessing the following three components: Organizational rewards, procedural justice, and supervisor support. In a study conducted by Lynne and Therese (2009), the researchers found that the reliability for 8-item of POSQ was very high (Cronbach alpha = 0.96). Yuwen (2009) also found the reliability for 8-item of POSQ to be very high (Cronbach alpha = 0.88). These studies used an 8-item perceived organizational support questionnaire, utilizing a 5-point Likert scale that consists of the following option: Strongly disagree, disagree, neither disagree or nor agree, agree, strongly agree.

Table 1
Summary of Questionnaire Scales

Construct	Instrument	Author (s)	Years	Journal	Items
Job Satisfaction	Michigan Organizational Assessment Questionnaires (MOAQ)-Job Satisfaction Subscale (JSS).	Seashore et al.	1982	Wiley, New York	3
Organizational Commitment	Organizational Commitment Questionnaire	Mowday et al.	1979	Journal of Vocational Behavior	9
Affective Commitment	Affective Commitment Questionnaire	Meyer et al.	1993	Journal of Applied Psychology	6
Corporate Ethical Values	Corporate Ethical values Questionnaire	Hunt et al.	1989	Journal of Marketing	5
Perceived Organizational Support	Perceived Organizational Support Scale	Eisenberger et al.	1986	Journal of Applied Psychology	8

Demographics of Professional Nurses

Several demographic variables were measured, all of which were independent variables. The demographics included age, education, job tenure, work experience, marital status, and income. A demographic questionnaire was devised as follows:

1. Age: Subjects were grouped by age using the following divisions: 21-30, 31-40, 41-50, and 51-60 years of age.
2. Level of education: Subjects were grouped by educational level using the following groupings: bachelor of science degree (nursing), bachelor's degree (other than nursing), master's degree (nursing), master's degree (other than nursing), doctoral degree (nursing), doctoral degree (other than nursing).
3. Job tenure: Subjects were grouped by job tenure using the following groupings: less than 1 year, 1-10 years, 11-20 years, and more than 20 years.
4. Work experience: Subjects were grouped by work experience using the following groupings: less than 1 year, 1-10 years, 11-20 years, and more than 20 years.
5. Marital status: Subjects were grouped by marital status using the following classifications: single, married, divorced/separated, and divorced/remarried.
6. Income: Subjects were grouped by income using the following categories: less than 10,000 ₪, 10,001-20,000 ₪, 20,001-30,000 ₪, 30,001-40,000 ₪, and more than 40,000 ₪.

Pilot Study

Pilot and Hungler (1999, p. 710) define a pilot study as a “small-scale version, or trial run, done in preparation for a major study.” Pilot and Hungler (1999, pp. 320-321) also state that a pilot study is done for many purposes: (1) to identify any parts of the instrument package that are difficult for the particular population of participants to read or understand or that may have been misinterpreted by them, (2) to identify any part of the data collection package that the participants find objectionable or offensive, (3) to determine whether the sequencing of instruments within the data collection package is smooth and effective, (4) to determine the need for the training of the data collection staff, and (5) to determine if the measure yields data with sufficient variability.

The pilot study was conducted with a convenient sample of 30 nurses selected by professional nurses employed in a general hospital (200 or more patient beds) in Southern Thailand. An introductory letter and each instrument were translated into Thai. The thirty-one questionnaires were given to the professional nurses who were responsible for distributing and collecting the questionnaires. After three weeks, the researcher received 20 usable copies of the questionnaire, thereby constituting a sixty-seven percent response rate. The internal consistency reliability coefficient (Cronbach’s alpha) was computed for each of the scales after the data were collected. Data analyses were conducted using the Statistical Product and Service Solution (SPSS) package for Windows. The coefficient alpha (Cronbach’s alpha) analysis was

calculated as a measure of the internal consistency for the four instruments.

The results are indicated in the table below:

Table 2

Reliability of Cronbach's Alpha of Variables

Variable Scale	Items	Alpha Coefficient
Job Satisfaction	3	0.808
Organizational Commitment	9	0.816
Affective Commitment	6	0.866
Corporate Ethical Values	5	0.808
Perceived Organizational Support	8	0.920

The responses of the pilot study helped in the following:

1. To clarify the questionnaire when translated from English into Thai
2. To clarify the reliability of instrument
3. To obtain feedback from the respondents with regard to any

confusing statements

Sampling Plan

The sample population in this study consists of professional nurses who work in public hospitals in southern Thailand. In collecting the data, a decision had to be made with respect to the following areas: (1) population; (2) sampling size; (3) sampling method and (4) data collection.

Population

In 2006, Thailand had 97,942 full-time professional nurses (MOPH, 2007). In this study, the target population consists of full-time professional nurse working in three public hospitals located in the South of Thailand: Vachira Phuket Hospital, Phang-nga and Takuapa Hospital, and Krabi Hospital. An outline of each hospital is presented below:

Vachira Phuket Hospital is a public general hospital with 503 beds, located in Phuket province in the South of Thailand.

Phang-nga and Takuapa Hospital are both public general hospitals, both with 215 beds, located in Phang-nga province in the South of Thailand.

Krabi Hospital is a public general hospital with 341 beds, located in Krabi province in the South of Thailand.

Sample Size

The sampling size of this research is based on that recommended by Yamane (1967), who devised the following formula for determining random sample size:

$$n = \frac{N}{1 + Ne^2}$$

where, n = Size of sample

N = Population of sample, and

e = Error of sampling method ($p = 0.05$)

The sample size for professional nurses for this study has been calculated according to the above recommendation as follows:

where $N = 97,942$, which was the number of full-time professional nurses in Thailand in 2006 (MOPH, 2007).

$$\begin{aligned}
 n &= \frac{N}{1 + Ne^2} \\
 n &= \frac{97,942}{1 + 97,942(.05)^2} \\
 &= 400
 \end{aligned}$$

Consequently, for the purposes of this research, the ideal sample of professional nurses consists of 400 respondents. However, in order to enhance the scope of generalization of this investigation, the researcher decided to increase the sample size to 600 professional nurses.

Sampling Method

This study has applied both probability and non-probability sampling method and probability sampling methods. The first stage of the probability sampling method consisted of stratified sampling which in this study was applied in three provinces (Phuket, Phang-nga, and Krabi) in southern Thailand. These three provinces have four public general hospitals (Vachira Phuket Hospital, Phang-nga and Takuapa Hospital, and Krabi Hospital.) each of which has between 200-500 beds.

The second stage was the non-probability sampling method, in which the research applied convenience sampling: This process involved selecting a sample of professional nurses who worked in public general hospitals in Phuket, Phang-nga, and Krabi. The researcher selected the sample from 600 professional nurses whom the researcher or head nurses of each department had met.

Data Collection

The data collection was conducted using the Michigan Organizational Assessment Questionnaires (MOAQ)-Job Satisfaction Subscale (JSS), an organizational commitment questionnaire, an affective commitment questionnaire, a corporate ethical values questionnaire, a perceived organizational support questionnaire, and demographic survey of professional nurses administered by the investigator. The researcher considered two possible ways to collect the requisite data: (1) mailing the questionnaires (2) handing out the questionnaires at the aforementioned public hospitals in southern Thailand.

The researcher explained the purpose of the research to the director of general hospital and professional nurses working in a general hospital in Phuket, Krabi, and Phang-nga. The research used mail questionnaires that are more advantageous than other ways of collecting data that are more time-consuming. As noted by Pedhazur and Schmelkin (1991), mail questionnaires are less costly, and less time-consuming. The researcher decided to use this method because it was necessary to collect data from 3 provinces in Thailand

(Phuket, Phangna, and Krabi) and the sample population in this study consisted of 600 professional nurses in different departments who did have the time to answer the questionnaire immediately. Thus, the researcher contacted the head nurses in each department to distribute and collect the questionnaires.

The second method used for this research was to hand out the questionnaires. The researcher prepared the instrument and handed it out to randomly selected respondents, while explaining the purpose of this study, assuring them of confidentiality and encouraging each of the respondents to fill out the forms in as fair and impartial a manner as possible.

Data Analysis Method

The data obtained will be analyzed using the SPSS 13.0 software. All the survey questionnaire results will be collected and entered into the SPSS for Windows program for statistical analysis. Three questions, separated into eighteen research hypotheses, were tested (see Table 3). These techniques include basic descriptive analysis, correlation analysis, and one-way analysis of variance (ANOVA). The procedure for the data analysis is set in 3 stages as follows:

Stage 1: Describing the demographic variables

Describing the demographic variables by using descriptive statistics, the data frequency was analyzed to determine any data entry errors or missing values.

Basic descriptive statistics, such as mean, frequency, and variances, were used to examine the distribution of responses.

Stage 2: Exploring the relationship for job satisfaction, organizational commitment, affective commitment, corporate ethical values, and perceived organizational support.

Describing hypothesis one and two tested the interaction between job satisfaction on the one hand and organizational commitment and affective commitment on the other. Next, hypothesis three was tested to determine the interaction between corporate ethical values and perceived organizational support. Hypothesis four tested the interaction between perceived organizational support and job satisfaction. Finally the interaction between corporate ethical values and organizational commitment was tested.

Therefore, each variable was analyzed using standard deviation or Cronbach's Alpha coefficient to test the reliability. Using Pearson's correlation (r) reflects the degree of the linear relationship between two variables. The correlation coefficients range from +1 to -1 meaning that there is a stronger relationship between variables. In this study, correlation analysis was used to test hypotheses one to five, and all hypotheses were accepted or rejected and considered statistically significant at the $p < .05$ level.

Stage 3: Describing the relationship between demographic variables and job satisfaction, organizational commitment, affective commitment, and corporate ethical values.

Describing hypotheses six to eighteen, the one-way ANOVA was used to determine the relationship between age, education level, work experience,

tenure, marital status, and income on the one hand, and job satisfaction, organizational commitment, affective commitment, and corporate ethical values on the other. One-Way Analysis of Variance (ANOVA) was used to test significant differences in the mean pertaining to job satisfaction, organizational commitment, affective commitment, and corporate ethical values. It was also used to test the demographic variables of professional nurses (age, education level, work experience, tenure, marital status, and income). In this study, a One-Way Analysis of Variance (ANOVA) was used to test hypotheses 6 to 18.

Chapter Summary

This chapter described the hypotheses tested, as well as the sampling design, research questions, research hypotheses, survey instruments, proposed data collection and data analysis. The methodological approach used in this study is positivist in that it utilizes quantitative analysis. The research instrument used in this study is a questionnaire. The ideal sample size for this study is 600 professional nurses who work in public general hospitals in southern Thailand. The data analysis conducted in this study includes basic descriptive statistics, correlation analysis, and One-Way Analysis of Variance (ANOVA). The next chapter will present the data analysis and findings.

Table 3

Research Question, Hypothesis, Research Purpose, Level of Measurement, Tool, and Analysis Employed in this Study

Research Questions	Hypothesis	Research Purpose	Level of Measurement	Tool	Analysis
Questions 1	Hypothesis 1	-Determine the correlation between Nurses Job Satisfaction and Organizational Commitment	-Ordinal	MOAQ-JSS and Organizational Commitment scale	-The Pearson's Correlation analysis (Pearson's) by SPSS
	Hypothesis 2	- Determine the correlation between Nurses' Job Satisfaction and Affective Commitment	-Ordinal	MOAQ-JSS and Affective Commitment Scale	The Pearson's Correlation analysis (Pearsons) by SPSS
Questions 2	Hypothesis 3	- Determine the correlation between Corporate Ethical Value and Perceived Organizational Support	-Ordinal	Corporate Ethical Values Scale and Perceived Organizational Support Scale	The Pearson's Correlation analysis (Pearson's) by SPSS

Table 3 (continued)

Research Questions	Hypothesis	Research Purpose	Level of Measurement	Tool	Analysis
	Hypothesis 4	-Determine the correlation between Perceived Organizational Support and Nurses Job Satisfaction	-Ordinal	Perceived Organizational Support Scale and MOAQ-JSS	The Pearson's Correlation analysis(Persons) by SPSS
Questions 3	Hypothesis 5	- Determine the correlation between Corporate Ethical Value and Organizational Commitment	-Ordinal	Corporate Ethical Value Scale and Organizational Commitment Scale	The Pearson's Correlation analysis (Person's) by SPSS
Professional nurses demographic	Hypothesis 6	-Determine the Attitudes toward Job Satisfaction when factored by Age	-Ratio	-Professional Nurses Demographic Form	-One-Way Analysis of Variance (ANOVA)

Table 3 (continued)

Research Questions	Hypothesis	Research Purpose	Level of Measurement	Tool	Analysis
	Hypothesis 7	-Determine the Attitudes toward Affective Commitment when factored by age	-Ratio	-Professional Nurses Demographic Form	-One-Way Analysis of Variance (ANOVA)
	Hypothesis 8	-Determine the Attitudes toward Organizational Commitment when factored by age	-Ratio	-Professional Nurses Demographic Form	-One-Way Analysis of Variance (ANOVA)
	Hypothesis 9	-Determine the Attitudes toward Corporate Ethical Values when factored by age	-Ratio	-Professional Nurses Demographic Form	-One-Way Analysis of Variance (ANOVA)
	Hypothesis 10	-Determine the Attitudes toward Job Satisfaction when factored by education	-Ratio	-Professional Nurses Demographic Form	-One-Way Analysis of Variance (ANOVA)

Table 3 (continued)

Research Questions	Hypothesis	Research Purpose	Level of Measurement	Tool	Analysis
	Hypothesis 11	-Determine the Attitudes toward Organizational Commitment when factored by Education	-Ratio	-Professional Nurses Demographic Form	-One-Way Analysis of Variance (ANOVA)
	Hypothesis 12	-Determine the Attitudes toward Job Satisfaction when factored by Tenure	-Ratio	-Professional Nurses Demographic Form	-One-Way Analysis of Variance (ANOVA)
	Hypothesis 13	-Determine the Attitudes toward Affective Commitment when factored by Tenure	-Ratio	-Professional Nurses Demographic Form	-One-Way Analysis of Variance (ANOVA)
	Hypothesis 14	-Determine the Attitudes toward Job Satisfaction when factored by Work Experience	-Ratio	-Professional Nurses Demographic Form	-One-Way Analysis of Variance (ANOVA)

Table 3 (continued)

Research Questions	Hypothesis	Research Purpose	Level of Measurement	Tool	Analysis
	Hypothesis 15	-Determine the Attitudes toward Affective Commitment when factored by Work Experience	-Ratio	-Professional Nurses Demographic Form	-One-Way Analysis of Variance (ANOVA)
	Hypothesis 16	-Determine the Attitudes toward Job Satisfaction when factored by Marital Status	-Ratio	-Professional Nurses Demographic Form	-One-Way Analysis of Variance (ANOVA)
	Hypothesis 17	-Determine the Attitudes toward Affective Commitment when factored by Marital Status	-Ratio	-Professional Nurses Demographic Form	-One-Way Analysis of Variance (ANOVA)

Table 3 (continued)

Research Questions	Hypothesis	Research Purpose	Level of Measurement	Tool	Analysis
	Hypothesis 18	-Determine the Attitudes toward Job Satisfaction when factored by Income	-Ratio	-Professional Nurses Demographic Form	-One-Way Analysis of Variance (ANOVA)