Chapter 4

Findings and Discussion

The purposes of this study were to examine nursing practice environment, to examine burnout as perceived by nurses in central general hospitals, and to examine the relationships between nursing practice environment and burnout among nurses in central general hospitals, The Socialist Republic of Vietnam. The findings are presented in four parts with tables and descriptions: (1) demographic characteristics of the participants, (2) nursing practice environment, (3) burnout, and (4) relationships between nursing practice environment and burnout. Discussion is conducted based on research objectives and results of the study.

Findings

Part I. Demographic characteristics of the participants

Subjects consisted of 351 staff nurses. The demographic data of the participants are shown in Table 3.

Table 3

Mean, Standard Deviation, Range, Frequency, and Percentage of Demographic Characteristics of the Subjects (n=351)

Characteristics	Frequency	Percentage (%)
Gender		
Female	296	84.33
Male	55	15.67
Age (years) ($\overline{X}$ = 34.64, *SD* = 10.15, range = 22 – 56)		
20 – 30	167	47.58
31 – 40	96	27.35
≥ 41	88	25.07
Marital Status		
Single	67	19.09
Married	280	79.77
Divorced	2	0.57
Widowed	2	0.57

Table 3 *(to be continued)*

Characteristics	Frequency	Percentage (%)
Years of experience (years) ($\bar{X}$ =11.60, *SD* = 10.59, range = 1 – 36)		
1 – 5	130	37.04
6 – 10	98	27.92
11 – 15	29	8.26
16 - 20	14	3.99
≥ 21	80	22.79
Educational Level		
Secondary	252	71.79
Diploma	40	11.40
Bachelor	59	16.81
Clinical Department		
Medical	84	23.93
Surgical	88	25.07
Pediatric	30	8.55
Obstetric	55	15.67
Specialty	94	26.78

Table 3 *(to be continued)*

Characteristics	Frequency	Percentage (%)
Number of Children		
No children	95	27.07
1	96	27.35
2	151	43.02
3	9	2.56
Hours of Working/week ($\bar{X}$ = 53.10, *SD* = 11.83, range = 40 – 96)		
40 – 50	211	60.11
51 – 60	67	19.09
≥ 61	73	20.8

The table showed that a majority of the subjects were female (84.3%) with the average age of 34.64 years, with 47.58% between 20 and 30 years old. Almost four fifths were married (79.77%). The largest number of the subjects had less than 5 years of working experience (37.04%). Significantly, an outstanding majority (71.79%) of the sample held only secondary certificate, and only 16.81% of them held bachelor's degrees. The subjects were categorized to five departments, and medical department, surgical, and specialty each accounted for approximately one fourth of the sample. Additionally, 43.02% of the subjects had two children. Unbelievably, the average working hour of staff nurses in this sample is extremely high (53.10 per week). Notably, the average working

hours of staff nurses in this sample was extremely high (53.10 per week), with 20% of the subjects working more than 61 hours per week, and several more than 80 hours.

Part II. Nursing practice environment

Mean, standard deviation of each dimension of the nursing practice environment as perceived by the subjects (n = 351) is presented in the table below.

Table 4

Means, Standard Deviations, and Features of the Nursing Practice Environment Perceived by the Subjects (n = 351)

Dimensions	Range	Minimum	Maximum	$\overline{X}$	SD	Feature
Nurse participation in hospital affairs	2.56	1.44	4.00	2.53	.50	Good
Nursing foundations for quality of care	2.20	1.60	3.80	2.61	.46	Good
Nurse manager ability, leadership and support	2.40	1.40	3.80	2.56	.49	Good
Staffing and resources adequacy	2.75	1.00	3.75	2.28	.55	Poor
Nurse-physician relations	2.67	1.33	4.00	2.60	.55	Good
The Entire Nursing Practice Environment						Favorable

Means and standard deviation of the five dimensions of the NPE are shown above. Four of five dimensions including nurse participation in hospital affairs ($\bar{X}$ = 2.53, *SD* = .50); nursing foundation for quality of care ($\bar{X}$ = 2.61, *SD* = .46); nurse manager ability, leadership and support ($\bar{X}$ =2.56, *SD* = .49); and nurse-physician relations ($\bar{X}$ =2.60, *SD* = .55) were perceived as good. Only nurse staffing and resources adequacy dimension was stated as poor ($\bar{X}$ =2.28, *SD* = .55). As a result, the entire NPE was concluded as favorable for nurses.

Moreover, nurse participation in hospital affairs scores ranged from 1.44 to 4.00. Nursing foundations for quality of care scores ranged from 1.60 to 3.80. Nurse manager ability, leadership and support scores ranged from 1.40 to 3.80. Staffing and resources adequacy scores ranged from 1.00 to 3.75. Nurse-physician relations scores ranged from 1.33 to 4.00

Part III. Burnout

This section aims to describe the mean score, the standard deviation, and the level of each subscale of burnout as perceived by the participants. These results are shown in Table 5.

Table 5

Minimum, Maximum, Mean, Standard Deviation, and Level of Burnout in each Dimension Among the Subjects (n=351)

Burnout Subscale	Range	Minimum	Maximum	$\overline{X}$	SD	Level
Emotional Exhaustion	47	5	52	23.26	9.55	Moderate
Depersonalization	25	0	25	7.94	4.75	Moderate
Personal Accomplishment	41	7	48	32.20	7.78	Moderate
Overall Burnout						Moderate

As shown above, all three subscales of burnout were scored at moderate level. The mean scores of emotional exhaustion, depersonalization, and personal accomplishment subscales were 23.26, 7.94, and 32.20, respectively. Overall burnout was judged as moderate. Moreover, emotional exhaustion, depersonalization, and personal accomplishment scores ranged from 5 to 53, 0 to 25, and 7 to 48, respectively.

Part IV. Relationships between nursing practice environment and burnout

The relationships between the nursing practice environment and burnout are listed in Table 6.

Table 6

Relationship Between the Nursing Practice Environment and Burnout Among the Subjects (n=351)

	Emotional exhaustion	Depersonalization	Personal accomplishment
Nurse participation in hospital affairs	-.35*	-.41*	.41*
Nursing foundations for quality of cares	-.28*	-.36*	.39*
Nurse manager ability, leadership and support	-.31*	-.33*	.34*
Staffing and resources adequacy	-.44*	-.41*	.39*
Nurse-physician relations	-.31*	-.21*	.34*
The entire nursing practice environment	-.37*	-.41*	.43*

* $p < .01$

A noticeable point in the table of the relationships between the nursing practice environment and burnout was that all tested pairs were statistically significant with $p < 0.01$. Specifically, the emotional exhaustion subscale had negative moderate correlations with nurse participation in hospital affairs, nurse manager ability, leadership and support, staffing and resources adequacy, nurse-physician relations dimension and the entire NPE ($r = -.35, -.31, -.44, -.31, -.37$, respectively) at $p < .01$, but was weakly correlated with nursing foundation for quality of care. Depersonalization was negatively moderately related with nurse participation in hospital affairs, foundations for quality of care, nurse

manager ability, leadership and support, staffing and resources adequacy dimension, and the entire NPE (r = -.41, -.36, -.33, -.41, -.41, respectively), except the nurse-physician relations dimension (r = -.21) at $p < .01$. There were positive moderate relationships in pairs between personal accomplishment subscale and five dimensions (nurse participation in hospital affairs, nursing foundations for quality of care, nurse manager ability, leadership and support, staffing and resources adequacy, and nurse-physician relations) of the NPE (r = .41, .39, .34, .39, .34, respectively) and the entire NPE (r = .43).

Discussion

This section includes a detailed explanation and discussion regarding each result that is found in this study through data analysis to answer the research objectives and research questions. The explanation of each objective is as follows:

Objective 1: To examine nursing practice environment as perceived by nurses in central general hospitals

The result of this study showed that nurses in central general hospitals in the north of Vietnam perceived their practice environment as favorable (four out of five dimensions were good as perceived by nurses, except the nurse staffing and resources dimension). This finding was consistent with findings of Gardner, et al. (2007) conducted in the USA; Middleton, et al. (2008) conducted in Australia; Roche, et al. (2010) conducted in Australia; and Eaton-Spiva, et al. (2010) conducted in the USA. Those studies, except the study of Gardner, et al. (2007) showed all five dimensions of the PES-NWI were good, while other studies also revealed that only the nurse staffing and

resources dimension was poor in the subjects' practice environment. It might be explained that the nursing profession is getting more concerns from health care leaders (VNA, 2010). As stated by the minister of health (Trieu, 2007), the MOH has been collaborating with other ministries to facilitate the nursing profession such as improving promotion policies, working conditions, and nursing education systems. Therefore, those support of high-rank administrators and together with concerns of hospital administration board might have significantly facilitated the nursing practice environment to be favorable. However, maybe due to the sensation of the content in the PES-NWI (Thu, the head of nursing department, Bach Mai Hospital, Personal Communication, February, 2012), nurses (mostly are female) might score more highly than it should be (Thinh, 2011). This reason might somewhat hide the real situation.

The results point out that staffing and resources adequacy was perceived as poor in providing good quality of care ($\overline{X}$ = 2.28, *SD* = .55). This result was congruent with previous studies by Middleton, et al. (2008), Chiang and Lin (2008), Roche, et al. (2010), and Hanrahan, et al. (2010). The findings were also reflective of the average working hours of 53.10 per week, which was 13 hours more than the criteria set by the government. This might be explained by the nursing shortage nationwide as reported by Muc (2009) that Vietnam needs about 145,000 nurses to fulfill for hospitals. Moreover, there is only fulltime nurses employed in health care system; therefore, nurses might increasingly feel unsupported when they got sick or needed leave. Furthermore, the high amount of paperwork and non-nursing task (Muc, 2011, cited by Dung, 2011) causes

them to feel they have little time to spend for patient care or discussing patients' problems with others.

As reported by the subjects, nurse participation in hospital affairs was good. This meant that they are able to participate in decision-making hospital-wide. Specifically, 54.70% of the subjects positively responded that the nurse participation in hospital affairs dimension was good in their practice environment (Appendix J). This may be due to the encouragement of the MOH (2008) that all health care organization should enlarge activity areas of nurses in order that they can contribute more in serving patients. Since then, the hospitals have facilitated nursing staff to have more power in their work. Moreover, majority of the subjects were female, this characteristic might indicate that they had less power desire and accepted things more easily than a male group. In addition, as concluded by Trinh, et al. (2010), the hospitals did encourage nurses to continue or enhance their education, both formal and informal, by giving them flexible schedules, and rewarding excellent study results. All these reasons could possibly explain why the participation in hospital affairs dimension was good ($\overline{X}$ = 2.53, *SD* = .50). However, a number of the subjects (45.30%) rated that they did not agree the dimension was present at their work (Appendix J). This would reflect the developing process in enlarging nurses' roles in hospitals.

Despite the fact that Vietnamese nursing profession is newly developing in recent years, it has been positively shown that nursing foundations for quality of care were good ($\overline{X}$ = 2.61, *SD* = .46). This meant that nurses were able to access continuing education

and nursing standards that were based on a nursing model of care. Furthermore, it pointed out that the practice environment consisted of a pervasive nursing philosophy, and high nursing clinical competency. This might be explained by the advancement in education among the subjects (college level accounted for 11.40%, bachelor level accounted for 16.81%) compared with the national report of the MOH (2007) in that college level accounted only 3.5% and bachelor level accounted for 4% nationwide. According to the 07-Regulation of the MOH (2011), hospitals must encourage their staff nurses to participate in continuing education so that they could have at least 24 hours of training or education, and this, in a certain extent, might affect the perception of the subjects about their participation ability in education. Additionally, the rapid development of the nursing education system at the baccalaureate level could in some ways help increase the competency of nursing staff by opening some short training classes for clinical nurses.

Meanwhile, many hospital administrators have expressed the important roles of nurses in providing good quality of care, and improving patient outcomes, and reasonably they might have facilitated nursing staffs to bring their knowledge into practice. Despite the whole sample perceiving positively on the dimension, the mean score was just lightly over the cut-point score of 2.5. There were 36.47% of the subjects who disagreed that the foundations for quality of care were good (Appendix J). This might be due to the medical philosophy still overwhelming the model of care (Yen, 2002). Moreover, ineffective legislations for continuing education would lead them to have that perception.

The findings also discovered that the subjects perceived that their nurse managers had good ability, leadership, and support of nurses ($\bar{X}$ = 2.56, *SD* = .49). One possible explanation of this would be the increasing effort of the government in educating and training nurse managers with almost 50% of them participating at least one leadership and management course (NSMH, 2010). Moreover, in the central hospitals, head nurses are usually highly selected and educated than in lower-level hospitals. As cited previously staffs in public sections somewhat were hesitant and unwilling to poorly report about their superiors (Thanh, Khymyu, & Baramee, 2010). This could be one reason making them tend to score higher than actual fact. However, there were as many as 43.59% of the subjects who did not suppose that their nurse managers had good ability, leadership, and support of nurses (Appendix J). This might be the high workload that had made them feel unsupported.

Expectedly, it was perceived that nurse and physician had a good relationship ($\bar{X}$ = 2.60, *SD* =.55); referring to positive working characteristics between two professionals. The finding was consistent with previous findings of Gardner, et al. (2007); Middleton, et al. (2008); Roche, et al. (2010); Moorer et al. (2010); (Eaton-Spiva, et al., 2010); and Hanrahan, et al. (2010). One possible explanation was that recently the ministry of health encouraged all health care facilities to give holistic care to patients at all levels of diseases. Since then, hospitals had widely motivated clinical departments to create multidisciplinary care-teams including nurses and physicians. Moreover, 84.30% of the subjects were female, with characteristics and the tradition of Vietnamese women,

as well Southeast Asian women, females are used to making concessions to avoid conflicts with others, and they tend to accept other's orders (Thinh, 2011). These good things could make the relationships between people, specifically two professionals, better. However, 44.73% of the subjects perceived that the relationship was poor (Appendix J). This could be the consequence of the long history of relationship as assistants to a superior profession. That long perception might be a barrier to create a good collegial relationship between them.

Objective 2: To examine burnout as perceived by nurses in central general hospitals

In this study, the findings showed moderate levels of all three subscales of the MBI. This implied that the subjects perceived they experienced moderate burnout over their work. Following sections will focus on discussing about each burnout's subscale in detail.

1. Emotional exhaustion

The study found a moderate level of emotional exhaustion ($\bar{X}$ = 23.26, *SD* = 9.55) perceived by staff nurses. It implies that the subjects were somewhat unable to offer themselves at a mental level and furthermore felt that they were not good in their actual abilities. This result was consistent with previous studies conducted by Demir et al. (2003) in Turkey; Alimoglu and Donmez (2005) in Turkey; Leiter and Laschinger (2006) in five countries including Canada, Unitied States, England, Scotland, and Germany;

Garrosa et al. (2008) in Spain; Lin et al. (2008) in China; Van Bogaert, et al. (2009) in Belgium; and Xu (2009) in China. This result was also similar with the result of the only study conducted in southern Vietnam by Thanh et al. (2010) among ICU nurses.

Possible explanations of this would be that central hospitals where the most severe patients are admitted as following the referral system, the patient-nurse ratio (10:1 in dayshift, and 20-30:1 in nightshift) was always far beyond the recommended ratio of the MOH (Thanh, 2003), and the patient-bad occupancy rates are usually higher than 100% (Quoc, 2011). Those factors individually result in higher stress for staff nurses. Furthermore, nurses' stress has been widely reported in Vietnam. Tam (2008) stated that nurses oftentimes have to cope with inappropriate behaviors of patients' relatives when their expectations of care were not met. Therefore, as indicated in results of the studies in other countries about these two variables, it might significantly increase nurses' emotional burnout (Garrosa, Moreno-Jiménez, Liang, & González, 2008; Iacovides, Fountoulakis, Kaprinis, & Kaprinis, 2002). Moreover, there were ambiguity and conflict of roles between different educational levels of nurses regulated in each hospital. For instance, bachelor and secondary nurses almost always do the same work and have the same responsibilities. Consequently, as shown by Leiter and Maslach (1988, cited in Garrosa, et al., 2008), role conflict and role ambiguity strongly influence on emotional exhaustion. Additionally, objective factors from the development and enlargement of the healthcare system recently, such as the technologically advanced equipment and the increasing shortage of staff, especially in central level, might have attributed to the emotional exhaustion. Fortunately, the government recently has issued several new

policies that empower nurses and give them more responsibilities (MOH, 2011). This regulation would lead them feel more interested and satisfied with their profession.

Other possible explanations might relate to the demographic characteristics of the subjects, where a big majority of the subjects were female (Table 1). According to Maslach and Jackson (1981), female nurses tend to score higher on the emotional exhaustion subscale. Moreover, the average of 53.10 hours per week, 13 more than the 40-hour regulation, significantly caused higher emotional exhaustion (Garrosa, et al., 2008). However, as 71.79% of the participants were secondary nurses, this would reduce the emotional exhaustion, as people who have lower educational level experience lower on emotional exhaustion (Maslach & Jackson (1981). This may be due to the lower education staff taking fewer responsibilities than the higher education staff, although they do almost the same work.

2. Depersonalization

The result of this study showed a moderate level of depersonalization among the subjects ($\overline{X}$ = 7.94, *SD* = 4.75). It was consistent with results of Leiter and Laschinger (2006) conducted in Canada, the US, England, Scotland, and Germany; Van Bogaert et al. (2009) conducted in a Belgian hospital; and Caldwell et al. (2006). However, it was higher than results found by Demir et al. (2003) conducted in Turkey; Alimoglu & Donmez (2005) conducted in Turkey; Garrosa et al. (2008) conducted in Spain; Lin et al. (2008) conducted in China; and Xu (2009) conducted in China.

It could be explained that because of the patient-crowded environment, especially with severe-disease patients in central hospitals where the patient-nurse ratio was around 8-10 in day shift and 20-30 in night shift (Thanh, 2003), the staff had limited time to communicate with patients. Therefore, the subjects might not feel they treated patients satisfactorily, and they could perceive the patients were pleased with that. Moreover, in central hospitals, the staff is used to others' death and pain. Subsequently, they might have less emotion towards others' feelings or pain (Garrosa, et al., 2008). Additionally, the result was similar to the reports of Loan (2006) and Yen (2002) in that nurses were complained of not having appropriate attitudes toward their care-receivers. However, with 84.33% of the subjects were females who were considered to have lower depersonalization levels (Maslach & Jackson, 1981).

Additional explanations could be due to the very high workload (53.10 working hours per week) among the subjects, so this could lead them to have higher depersonalization (Garrosa, et al., 2008). Moreover, 47.58% of them were under 33 years old. As indicated previously, age negatively predicted the depersonalization subscale, which meant older nurses had lower depersonalization than the younger nurses. In addition, since 71.79% of the participants were secondary nurses, this would increase the depersonalization among them; as found by Maslach and Jackson (1981), people who had lower educational level led to higher depersonalization. It could be explained that those who have low education often work as assistant for others, so they just try to accomplish their job and do not really care about how recipients perceived about what they do.

3. Personal accomplishment

The study found a moderate level of personal accomplishment subscale of burnout among the participants ($\bar{X}$ = 32.20, *SD* = 7.78). The result was congruent with findings of Alimoglu and Donmez (2005) conducted in Turkey; Leiter and Laschinger (2006) conducted in five Western countries including Canada, the US, England, Scotland, and Germany; Lin et al. (2008) in China; Van Bogaert et al. (2009) in Belgium; and Xu (2009) in China. However, it was lower than findings found by Demir et al. (2003) in Turkey; Garrosa et al. (2008) in Spain; and Hanrahan et al. (2010) in the US. One explanation could be inadequate staffing and lack of resources among the hospitals, which would lead them to feel somewhat unable to get their work done well. Yet, the reward system in hospitals also motivates every staff to accomplish their work as the top worker, so this might generally increase the accomplishment among the staff. The two above factors might result in the moderate level of personal accomplishment.

There might be some other explanations of the findings. Firstly, a major group of nurses stated highly expectations in the profession before while in school; however, they were disappointed upon starting their career because of so much repetitive work, getting bored, and having indifferent feelings with routine tasks (Thanh, 2008). Therefore, they might self-underrate their performance. Secondly, one explanation would be the severe high workload of the subjects with 13.10 hours higher than the regulated working time per week. Moreover, the amount of non-nursing tasks took almost 50% of their time. Consequently, they had less time to get their work done well. Thirdly, with 37.04% of the

subjects had less than 5 years experience, which might sometimes make them being unable to solve complicated patients' problems. Finally, 71.79% of the subjects were secondary nurses, so, as found by Maslach and Jackson (1981) those who had lower education would have lower personal accomplishment than others.

Objective 3. To examine the relationships between nursing practice environment and burnout among nurses in central general hospitals

The findings of relationships between nursing practice environment and each subscale of burnout are discussed below.

1. Negative relationships between the entire nursing practice environment and its dimensions with emotional exhaustion.

The findings of the study pointed out that the entire nursing practice environment had a negative moderate interaction with emotional exhaustion subscale ($r = -.37$, $p < .01$) (Table 6). The result indicated that when the subjects perceived their practice environment more favorably, they tended to have lower levels of emotional exhaustion. Thí is in the same direction as the model of Mitchell, et al. (1998), in which the system characteristics or the organization environment had interactions with outcomes of the healthcare team. It also strengthened the previous studies in that a favorable nursing practice environment would satisfy nurses and bring them well-being (Aiken, Clarke, Sloan, Lake, & Cheney, 2008). For example, when organizations facilitated the nursing practice, nurses might feel freer in decision-making and using their abilities in taking care of patients. This then might make them feel less emotionally exhausted. The result is

consistent with results in studies of Hanrahan, et al. (2010) in the US; Laschinger, et al. (2009) in the US; and Gunnarsdóttir, et al. (2009) in Iceland.

For nurse participation in hospital affairs dimension, the researcher found a negative moderate correlation with the emotional exhaustion subscale ($r = -.35$, $p < .01$) (Table 6). This shows that when the participants perceived themselves being more involved in hospital policy decisions, and having more opportunities in career development, they mostly felt less emotionally exhausted. It can be interpreted as when the subjects were more likely to access to the hospital administrations, have more chances for advancement, and openly communicate with their superior, they would feel more satisfied, valued, and less emotionally exhausted (Aiken & Patrician, 2000). The result matched with the findings of Hanrahan, et al. (2010) in the US.

A negative weak correlation ($r = -.28$, $p < .01$) (Table 6) with the nursing foundations for quality of nursing care was demonstrated in the Table 6. It showed that when the participants perceived highly on their ability to access to continuing education and nursing standards based on a nursing model of care, they seemed to perceive low emotional exhaustion. This was coincided with the finding of Hanrahan, et el. (2010) in the US, and Gunnarsdóttir, et al. (2009) in Iceland. It could be explained that when a profession is given more capability to access continuing education and use their knowledge, their career might become more interesting. Moreover, due to the reward system, those who have given and devoted themselves for their hospitals, and good

patient care are rewarded so that they might be happier with their job. Thus, they might feel more energized about their job (Maslach & Jackson, 1981).

The result showed a negative moderate correlation between the nurse manager ability, leadership and support dimension and the emotional exhaustion subscale ($r = -.31$, $p < .01$) (Table 6). This was consistent with the findings of Hanrahan, et al. (2010); Van Bogaert, et al. (2010); and Friese (2005) that when direct nurse managers were highly perceived as having good ability, leadership, and supportive for staffs thereby creating a satisfactory working environment in their units, their staff were less likely to be emotionally exhausted.

The staffing and resources adequacy dimension and the emotional exhaustion subscale had a negative moderate relationship ($r = -.44$, $p < .01$) (Table 6). The finding was similar to the findings of Hanrahan, et al. (2010); Friese (2005); and Rochefort & Clarke (2010) that when hospitals more adequately provided staff and resources, their staffs would be less likely to suffer emotionally. It might be interpreted that when nurse staffing and resources were adequate, nurses would have more time to spend with patients and communicating with peers, which might help them feel less stress and more available at work.

It was moreover found that the nurse-physician relations dimension and the emotional exhaustion subscale had a negative moderate correlation ($r = -.31$, $p < 0.01$) (Table 6). The finding was similar with studies of Hanrahan, et al. (2010); Van Bogaert, et al. (2010); Friese (2005); Laschinger et al. (2009); and (Gunnarsdóttir, et al., 2009). A

good and fair collegial relationship between nurses and physicians was believed to satisfy nurses' desire and bring a pleasurable environment for them, thus reducing stress and emotional problems among them.

2. Negative relationships between the entire nursing practice environment and its dimensions with depersonalization subscale.

The study found that the entire nursing practice environment was negatively and moderately associated with the depersonalization subscale ($r = -.41$, $p < .01$) (Table 6). According to Aiken and Patrician (2000), nurse outcomes were strongly affected by the environment in which care was delivered. When nurses are given authority together with responsibility, autonomy, and control over patient care resources, they are in better position to establish positive relations with physicians. In addition, nurses functioning in such an environment can apply resources as appropriate for best meeting patient needs and for communicating problems to the physician in a timely manner. Hence, negative and cynical attitudes of nurses were seldom developed towards the recipients. It was congruent with findings of Hanrahan, et al. (2010); and Van Bogaert, et al. (2010).

The nurse participation in hospital affairs dimension displayed a negative moderate correlation with the depersonalization subscale ($r = -.41$, $p < .01$) (Table 6). It was consistent with findings of Hanrahan, et al. (2010) that when nurses were more involved in hospital and nursing department affairs, had more opportunities for advancement, communicated openly with a responsive nursing administration and

acknowledged a powerful, visible, and accessible nurse executive, they might in return become more open, free, and kindly towards their patients.

Regarding nursing foundations for quality of care dimension, the study found a negative moderate correlation with the depersonalization subscale ($r = -.36$, $p < .01$) (Table 6). This meant that when the subjects perceived higher on foundation for quality of care dimension, they tended to rate lower on the depersonalization subscale. This finding was congruent with the finding of Hanrahan, et al. (2010). It could be explained that once the nursing profession was highly appreciated by the organization and internal society, nurses had chances to provide high nursing standards using model in which patients were the center of care, hence treating their patients more humanely and seriously.

The nurse manager ability, leadership and support dimension was found to negatively moderately relate to the depersonalization subscale ($r = -.33$, $p < .01$) (Table 6). This indicated that if the participants rated more highly on the nurse manager ability, leadership, and support dimension more highly, they were likely to rate lower on the depersonalization subscale. The result was consistent with what Hanrahan, et al. (2010) and Van Bogaert, et al. (2010) reported. It might be interpreted that since the subjects received a caring, responsive, and supportive treatment from their managers, they would be happier and more moral towards others. Subsequently, they would have developed positive attitudes towards their care-recipients.

It was shown that staffing and resources adequacy dimension and depersonalization subscale had a negative moderate relationship ($r = -.41$, $p < .01$) (Table 6). This illustrated that when nurses scored higher on the staffing and resources adequacy dimension, they tended to score lower on depersonalization subscale. This was congruent with the finding of Hanrahan, et al. (2010). This result could be explained that when staffing and resources were adequate, nurses would have more time to communicate with patients and colleagues. Therefore, they might have a better relationship and understanding with patients, which might lead to a better point of view towards them.

Table 6 shows a negative weak correlation between the nurse-physician relations dimension and the depersonalization subscale ($r = -.21$, $p < .01$). Thus when the subjects perceived higher on the nurse-physician relationship, they seemingly perceived lower on depersonalization. This finding was similar to reports of Hanrahan, et al. (2010) and Van Bogaert, et al. (2010) that when nurses and physicians had a good relationship, nurses felt a positive, friendly, and responsive communication environment, hence it would result in positive behaviors among them. That might explain the finding.

3. Positive relationships between the entire nursing practice environment and its dimensions with the personal accomplishment subscale.

As illustrated in Table 6, the entire nursing practice environment was positively moderately associated with the personal accomplishment subscale ($r = .43$, $p < .01$). This was consistent with finding of Van Bogaert, et al. (2010) that when the subjects perceived more favorably on the nursing practice environment, they tended to perceived higher on

their accomplishment. It could be interpreted that when nurses felt facilitated from their organization, they would have more confidence in their job and profession. According to Lake (2002), when nursing practice environment was favorable, the staff would be more satisfied with their jobs.

In Table 6, the nurse participation in hospital affairs dimension and the personal accomplishment subscale are shown to have a positive moderate relationship ($r = .41$, $p < .01$). Although this result was different from the finding of Hanrahan, et al. (2010), the only study that examined the relationship between two variables, and found no correlation; it was conceptually appropriate (Lake, 2002; Mitchell, et al., 1998). It might be interpreted that when nurses received acknowledgement and hospital-wide recognition, it would make nurses feel more confident on their ability.

The study revealed a positive moderate correlation between the nursing foundations for quality of care dimension and the personal accomplishment subscale ($r = .39$, $p < .01$) (Table 6). The finding was different from the finding of Hanrahan, et al. (2010); however, it was conceptually reasonable with concepts of Lake, (2002) and Mitchell, et al. (2010). The finding could be explained that when the knowledge and skills of the subjects were acknowledged and widely applied, the subjects might feel valuable in their work.

In terms of nurse manager ability, leadership and support dimension, the study discovered a positive moderate correlation with the personal accomplishment subscale ($r = .34$, $p < .01$) (Table 6). It was similar to the finding of Van Bogaert, et al. (2010) that

when the subjects perceived higher on the nurse manager leadership and management dimension, they were likely to perceive higher on the personal accomplishment subscale. It might be explained that when a manager provided an environment that supported and recognized achievements of nursing staffs, the staff would feel more satisfied with their accomplishments.

For staffing and resources adequacy dimension, it was shown in Table 6 that there was a significant positive moderate correlation with the personal accomplishment subscale ($r = .39$, $p < .01$). This finding was consistent with Van Bogaert, et al. (2010)'s finding, that when nurse staffing and resources were more available and adequate, nurses rated higher on their personal accomplishments. It could be explained that when staffing and resources were adequate, the subjects had more time and more equipment to carefully do their job, so they would believe their work was done better.

A significant positive moderate correlation was found between the nurse-physician relations dimension and the personal accomplishment subscale ($r = .34$, $p < .01$) (Table 6). The finding was consistent with Van Bogaert, et al. (2010), that when the subjects viewed their relationship with physician better, they would also view their personal accomplishment better. It might be explained that when the teamwork was widespread and harmonious, professionals among the team would support and share the work for each other, thus they would better describe the work accomplished.