

ความต้องการของงาน ทรัพยากรของงานและความผูกพันในงานของพยาบาลใน
โรงพยาบาลระดับตติยภูมิ จังหวัดทานเฮา สาธารณรัฐสังคมนิยมเวียดนาม

Job Demands, Job Resources and Work Engagement
among Nurses in Tertiary Care Hospitals,
Thanh Hoa Province, The Socialist Republic of Vietnam

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บทคัดย่อ

ทรัพยากรของงานเป็นสิ่งกระตุ้นและส่งเสริมให้เกิดความเต็มใจในการที่จะทุ่มเทความพยายามและความสามารถในการทำงาน ในขณะที่ความต้องการของงานทำให้บุคลากรเหน็ดเหนื่อยจากการใช้พลังงานกายและพลังใจในงาน บุคลากรที่มีการรับรู้ความต้องการของงานต่ำ และทรัพยากรของงานสูงย่อมมีความผูกพันในงานสูง การศึกษานี้มีวัตถุประสงค์เพื่อศึกษาความต้องการของงาน ทรัพยากรของงาน และความผูกพันในงาน รวมถึงทดสอบความสัมพันธ์ระหว่างความต้องการของงาน ทรัพยากรของงาน และความผูกพันในงานของพยาบาลในโรงพยาบาลระดับตติยภูมิ จังหวัดทานเฮา สาธารณรัฐสังคมนิยมเวียดนาม กลุ่มตัวอย่างของการศึกษาคือพยาบาลจำนวน 352 คนซึ่งสุ่มคัดเลือกจากพยาบาลในโรงพยาบาลระดับตติยภูมิ 6 แห่งในจังหวัดทานเฮา เครื่องมือที่ใช้ในการวิจัยได้แก่ แบบวัดความต้องการของงานและทรัพยากรของงาน (JD-RS) และแบบวัดความผูกพันในงาน 9 ข้อของยูทริช (UWES-9) ซึ่ง JD-RS และ UWES-9 ได้รับการตรวจสอบความตรงโดยผู้พัฒนาเครื่องมือ ค่าสัมประสิทธิ์ความเชื่อมั่นของแบบวัดทั้งสองเท่ากับ .83 และ .82 ตามลำดับ วิเคราะห์ข้อมูลโดยใช้สถิติเชิงพรรณนาและสัมประสิทธิ์สหสัมพันธ์แบบลำดับที่ของสเปียร์แมน (Spearman's rank-order correlation)

ผลการศึกษาพบว่า

1. ความต้องการของงานและทรัพยากรของงานตามการรับรู้ของพยาบาลอยู่ในระดับปานกลาง
2. ความผูกพันในงานตามการรับรู้ของพยาบาลอยู่ในระดับปานกลาง

ความต้องการของงานไม่มีความสัมพันธ์กับความผูกพันในงานแต่ทรัพยากรของงานมีความสัมพันธ์ทางบวกในระดับปานกลางกับความผูกพันในงานอย่างมีนัยสำคัญทางสถิติ

ผลการศึกษาได้ให้ ข้อมูลที่มีคุณค่าต่อผู้บริหารทางการพยาบาลในโรงพยาบาลตติยภูมิ ทั้ง 6 แห่งในการศึกษาที่จะเข้าใจความสัมพันธ์ระหว่างความต้องการของงาน ทรัพยากรของงาน และความผูกพันในงาน เพื่อพัฒนากลยุทธ์ที่เหมาะสมในการที่จะลดความต้องการของงานและเพิ่มทรัพยากรของงานเพื่อเป็นการเพิ่มความผูกพันในงานของพยาบาลต่อไป

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Abstract

Job resources stimulate and forward the willingness to dedicate one's efforts and abilities to the work whereas job demands exhaust employees' mental and physical energy. When the job resources increase, job demand decrease, work engagement will increase. The purposes of this study were to examine job demands, job resources, and work engagement as well as to examine the relationship between job demands, job resources and work engagement among nurses in tertiary care hospitals in Thanh Hoa province, the Socialist Republic of Vietnam. The sample consisted of 352 nurses, randomly selected from nurses in six tertiary care hospitals in Thanh Hoa Province. The research instruments were the Job Demands-Resources Scale (JDERS) and the 9-item Utrecht Work Engagement Scale (UWES-9). The validity of JDERS and UWES were confirmed for validity by the developers. The reliability coefficient of the JDERS and UWES-9 were .83 and .82, respectively. Data were analyzed using descriptive statistics and Spearman's rank-order correlation.

The results of the study indicated that;

1. The job demands and job resources as perceived by nurses were at moderate level.
2. The overall score of work engagements perceived by nurses was at an average level.
3. There was no relationship between job demands and work engagement whereas the job resources showed statistically significant moderate positive relationship with work engagement.

The results of this study could provide valuable information to nurse administrators in six tertiary care hospitals to understand the relationship between job demands, job resources and nurse work engagement for the development of proper strategies to reduce job demand and increase job resources in order to enhance work engagement among nurses.

Background and Significance

Nowadays, there are many challenges that the healthcare systems are facing, such as the rising costs of healthcare, an aging population and the emergence of new diseases. These challenges cause strain not only on hospitals but also their employees (Othman & Nasuridin, 2011). Luthans, Lebsack, and Lebsack (2008) stated that nursing professionals play an important role in the healthcare system and contribute to the health and well-being of society. Their attitudes and behaviors with

patients significantly affect patients' perceived service quality and satisfaction. Therefore, the healthcare organizations need highly competent nurses who are engaged in their work in order to produce efficient and effective care and achieve organizational goals.

Schaufeli, Salanova, Gonzalez-Roma, and Bakker (2002a) defined work engagement as a positive, fulfilling, work-related state of mind. According to Schaufeli et al (2002a), work engagement consists of three dimensions. First, *vigor* refers to high levels of energy and mental



resilience while working, the willingness to invest effort in one's work, not being easily fatigued, and persistence even in the face of difficulties. Second, *dedication* refers to deriving a sense of significance from one's work, by feeling enthusiastic and proud about one's job, and by feeling inspired and challenged by it. Third, *absorption* refers to being totally and happily immersed in one's work and having difficulties detaching oneself from it. Work engagement plays an important role for the staff, clients and organization. For the nurse, Wu (2010) claimed that engaged nurses will consider patients in the central part of nursing care by using their heart in service. Work engagement can lead to numerous consequences to staff, clients, and organizations. For individual employees, work engagement can lead to greater job and life satisfaction, high performance ratings, feelings of choice and control, fairness and justice, and meaningful and valued work (Schaufeli & Bakker, 2003). Furthermore, work engagement can cause employees to feel more satisfied with their jobs, more committed to the organization and a higher level of intention to stay with their organizations (Demerouti, Bakker, Nachreiner & Schaufeli, 2001). This can also reduce levels of depression, distress and psychosomatic complaints (Schaufeli, Taris, & Van Rhenen, 2003). For the organization, engaged employees produce positive work outcomes such as increased productivity, satisfaction, and reduced turnover (Kahn, 1990). It is clear that engaged employees have a sense of energetic and effective relation with their jobs and perceive that they are capable to manage their job demands (Schaufeli, Bakker, & Salanova, 2006).

Job demands is the aspect of a job that could potentially cause strain in cases where they exceed the employee's adaptive capability (Rothmann, Mostert, & Strydom, 2006). *Job demands* refers to the pace and amount of work, mental load, and emotional load (Jackson & Rothmann, 2005). Research studies have identified the relationship between job demands and work engagement. However, the results illustrated inconsistent findings in terms of both the magnitude and the direction of relationship. Hakanen, Bakker, and Demerouti (2005) found that job demands were consistently negatively related to work engagement ($r = -.2, p < 0.001$). Recently, Othman and Nasurdin (2011) found that work engagement was positively associated with job demand ($r = .198, p < 0.001$).

In addition to job demands, *job resource* is a factor that influences to work engagement of employees. *Job resources* refers to the extent to which a job offers assets/opportunities to individual employees (Rothmann et al., 2006). According to Rothmann et al (2006), job resources consist of five dimensions. First, *organizational support* refers to the relationship with the supervisor, ambiguities regarding work, information, communication, and participation and contact possibilities. Second, *growth opportunities* refer to variety in work, opportunities to learn, and independence in work. Third, *job insecurity* refers to uncertainty about the future. Fourth, *social support* refers to contact opportunities with others and social support from colleagues. Finally, *advancement* refers to pay, financial progress in the job, and promotion opportunities (Jackson & Rothmann, 2005).



The relationship between job resources and work engagement has been tested by some scholars. Hakanen, Bakker, and Demerouti (2005) found that job resources were positively associated with engagement. A year later, Rothmann and Jordaan (2006) found that vigor and dedication - two dimensions of work engagement - were significantly positively related to job resources ($r = .40, p < 0.01$; $r = .41, p < 0.01$, respectively). Recently, Othman and Nasurdin (2011) found that work engagement was positively associated with job resources ($r = .47, p < 0.001$). In summary, studies have found positive correlations between job resources and work engagement.

The Vietnamese Nurse Association (VNA) was established in 1990 to promote nursing as a higher respected profession. Since the foundation of the VNA, the nursing profession has got more consideration and investment from the government. However, nurses working in tertiary care hospitals are facing many factors that make nurses unhappy and lack energy to work. In clinical routines, nurses often do the same work every day such as taking vital signs, assisting doctors performing medical procedures, completing the nursing documents (Thanh, 2008). In addition, nurses did not gain the appreciation that they expected. They rarely had the chance to study nursing science and research or attend seminars or conferences related to nursing issues (Giang, 2011). Furthermore, tertiary care hospitals have high occupancy rates, which are often 130-145% (Thanh, Khymyu, & Baramée, 2010). Duty nurses in these hospitals have to work 12 - 24 hours/shift. On the night shift, one nurse has to take

care of 20 to 30 patients depending on each department, and during daytime, the nurse-patient ratio is about 1:10 (Thanh et al., 2010). As a result, these situations cause nurses stress, unhappiness, and lack of energy to do their work, resulting in “burning out”.

Due to the inconsistent findings of the results of the relationship between job demands, and work engagement together with the absence of any study identifying job demands, job resources and work engagement in Vietnam, it is necessary to conduct a study to examine the association between job demands, job resources and work engagement among Vietnam’s nurses.

Objectives

This descriptive correlational study aimed to examine the level of job demands, job resources, work engagement and examine the relationship between job demands and work engagement and the relationship between job resources and work engagement among nurses in tertiary care hospitals, Thanh Hoa province, the Socialist Republic of Vietnam.

Conceptual Framework

The conceptual framework of this study is based on the literature review. *Job demands* refers to the aspects of a job that could potentially cause strain in cases where they exceed the employee’s adaptive capability, and *job resources* refers to the extent to which a job offers assets/opportunities to individual employees (Rothmann et al., 2006). Job demand is *workload*, and job resources include *organizational support, growth opportunities, job insecurity, social support, and advancement*.



For the *work engagement*, it refers to a positive, fulfilling, work-related state of mind characterized by *vigor, dedication, and absorption* (Schaufeli et al., 2002a). According to Bakker and Demerouti (2007), job resources stimulates and forwards the willingness to dedicate one's efforts and abilities to the work task whereas job demands exhausts employees' mental and physical resources, leading to the reduction of energy. When job resources increases, job demand decreases, work engagement will therefore increase.

Methodology

Research Design

A descriptive correlational research was designed to assess the levels of job demands, job resources, and work engagement, and to examine the relationship between job demands, job resources dimensions and work engagement among nurses in tertiary hospitals in Thanh Hoa province, the Socialist Republic of Vietnam.

Population and Sample

The population was 1490 nurses who had been working for at least one year in six tertiary hospitals located in the Thanh Hoa province including Thanh Hoa General Hospital, Thanh Hoa Pediatric Hospital, Thanh Hoa Obstetrics and Gynecology Hospital, Thanh Hoa Ophthalmologic Hospital, Thanh Hoa Dermatologic Hospital, and Thanh Hoa Endocrinal Hospital. The sample, calculated by Yamane formula, consisted of 378 nurses. The stratified random sampling method was used to select nurses from the name list of nurses in each department of the hospitals. The number of nurses in each department was selected based

on the proportion of number of nurses in each department of each hospital setting. A total of 378 questionnaires were distributed to the sample by coordinators of each hospital. After two weeks, the researcher received 358 questionnaires. Among them, 352 (93.12%) questionnaires were completed and used for data analysis.

Research Instrument

The instrument used for data collection was a questionnaire composed of three parts:

1) The Demographic Data Collecting Form was developed by the researcher. The questionnaires included questions about gender, age, marital status, years of working as a nurse, educational level, clinical department, number of children, monthly income and number of working hours/week. The demographic information addressing personal characteristics contained both closed and open-ended questions.

2) The Job Demands-Resources Scale (JDERS) was developed by Jackson and Rothmann (2005). It has seven items for identifying job demands and thirty-three items for identifying job resources, rated on a four-point scale ranging from 1 = *never*, 2 = *sometimes*, 3 = *usually*, 4 = *always*. The mean scores (overall and for each dimension) of JDERS were divided into *low, moderate, and high levels*. The Cronbach's alpha coefficient of JDERS in this study was .83

3) The 9-item Utrecht Work Engagement Scale (UWES-9) was developed by Schaufeli, Bakker, and Salanova (2006). There are three components of work engagement: 1) vigor (VI) with three items, 2) dedication (DE) with three items, and 3) absorption (AB) with three items. The



engagement items were rated on a 7-point Likert scale, ranging from 0 = *never* to 6 = *always*; higher scores indicated higher engagement. The mean scores (overall and each dimension) of UWES-9 were divided into *very low, low, average, high, and very high level*.

The JDRS and UWES-9 were translated from English to Vietnamese. The translated version was checked by one Vietnamese bilingual expert. The original English and back-translated versions were checked for equivalence or closest meaning by a native English speaker. The validity of JDRS and UWES were confirmed for validity by the developers. The reliability coefficients of the JDRS and UWES-9 were .83 and .82, respectively.

Ethical consideration

The research proposal was submitted to the Research Ethics Review committee, the Faculty of Nursing, Chiang Mai University, Thailand. Approval of this study was obtained before collecting data. Then approval was given from hospital directors. A research information form and a consent form were given to the subjects. Nurses were free to refuse to participate or withdraw from the study at any time without any punishment. Confidentiality and anonymity of individual responses were guaranteed by a statement included in the cover letter information provided by the subjects, used only for the purpose of the study and remained confidential.

Data Collection

Data were collected from February to April, 2014. After getting permissions from directors of

six tertiary care hospitals, the researcher met with nurse directors of each hospital to inform the purpose, objectives, and benefits of the study and asked to assign one research coordinator from each hospital. A total of 378 questionnaires were distributed to the sample by coordinators of each hospital. After two weeks, the researcher received 358 questionnaires (94.71%). Among them, 352 (93.12%) questionnaires were completed and used for data analysis.

Data Analysis

Data were analyzed by computer software package. Descriptive statistics was used to analyze frequency, percentage, range, mean and standard deviations of the demographic data, job demands, job resources, and work engagement. Spearman's rho rank-order coefficient analysis was used to examine the relationship between job demands and work engagement as well as the relationship between job resources and work engagement.

Results

The subjects were 352 nurses from six tertiary care hospitals in Thanh Hoa province. Demographic characteristics of the subjects are presented in Table 1. The majority of the subjects were female (83.81%). The average age was 31.28 years old (SD =8.32), and 62.50% were between 23 and 30 years old. Among the subjects, about 77.56% were married with 68.47% having at least one child. Just over half of the subjects had been working for more than five years (50.57%) and about half of them (49.72%) had finished secondary level of nursing



education. Most of the subjects worked in medical departments (57.95%). Almost 56 percent of the subjects had monthly incomes from 2,000,000 to 4,000,000 VND (100-200 USD), and 76.42% of subjects worked from 40- 49 hours per week

Table 1: Frequency, Percentage, Mean, Standard Deviation and Range of Demographic Characteristics of the Subjects (n=352)

Characteristics	Frequency	Percentage (%)
Gender		
Male	57	16.19
Female	295	83.81
Age (years) (\bar{X} = 31.28, SD = 8.32, Range = 23-57 years old)		
23-30	220	62.50
31-40	80	22.72
41-50	30	8.52
51-57	22	6.26
Years of working as a nurse (\bar{X} = 6, SD = 8.44, Range = 1-37 years)		
1 - 5	174	49.43
6 - 10	110	31.25
11 - 15	18	5.11
> 15	50	14.21
Educational level		
Secondary level	175	49.72
Diploma certificate	137	38.92
Bachelor degree	40	11.36
Clinical department		
Special (ICU, NICU)	53	15.06
Medical	204	57.95
Surgical	95	26.99
Marital status		
Single	77	21.88
Married	273	77.56
Divorced	2	0.56
Number of children		
0	111	31.53
1	115	32.68
2	124	35.23
3	2	0.56
Salary (VND)		
< 2,000,000 (VND)	18	5.11
2,000,000 - 4,000,000 (VND)	198	56.25
>4,000,000 (VND)	136	38.64
Number of working hours/week (\bar{x} = 45.89, SD = 1.14, Range = 40-90)		
40-49	269	76.42
50-59	40	11.36
>60	43	12.22



1. Job Demands and Job Resources

The subjects perceived the job demand and overall job resources at a moderate level (\bar{x} = 16.53, SD=2.99; \bar{x} = 97.30, SD=10.85, respectively). For the five dimensions of job

resources, the subjects perceived the dimensions of growth opportunity and advancement at moderate levels whereas the dimensions of organizational support, social support, and job insecurity were at high levels (Table 2).

Table 2 Mean, and Standard Deviation of Job Demand and Job Resources as Perceived by the Subjects (n=352)

	Range	\bar{x}	SD	level
Job demand	10.00- 26.00	16.53	2.99	Moderate
Overall Job resources	64.00-129.0	97.30	10.85	Moderate
Growth Opportunity	8.00-28.00	19.44	3.24	Moderate
Organizational Support	28.00-56.00	43.52	5.75	High
Social Support	4.00 – 16.00	12.43	2.14	High
Job Insecurity	3.00 – 12.00	10.23	2.27	High
Advancement	6.00 – 20.00	11.68	3.19	Moderate

2. Work Engagement

The overall score and score of all three dimensions of work engagement (vigor, dedication, and absorption) were average levels

(\bar{x} = 4.13, SD = 0.85; \bar{x} = 3.82, SD = 0.98; \bar{x} = 4.44, SD = 0.96; \bar{x} = 4.14, SD = 0.90, respectively) (Table 3).

Table 3 Range, Mean, Standard Deviation, and Level of Work Engagement as Perceived by the Subjects (n=352)

Dimension of Work Engagement	Range	\bar{x}	SD	Level
Overall score	0.04 – 6.00	4.13	.85	Average
Vigor	0.00 – 6.00	3.82	.98	Average
Dedication	0.33 – 6.00	4.44	.96	Average
Absorption	0.00 – 6.00	4.14	.90	Average

3. Relationship between Job Demands, Job Resources and Work Engagement

The results of this study showed that there was no relationship between job demands and work engagement. In addition, four of the five dimensions of job resources including growth opportunity, organizational support, social

support, and advancement showed significantly positive relationships with work engagement (r = .39, .23, .27, .27, .34, respectively (p < 0.01). On the other hand, job insecurity showed a significantly negative relationship with work engagement (r = -.13, p < 0.05) (Table 4).



Table 4 Relationship between job demands, job resources and work engagement (n = 352)

	Overall work engagement
Job demands	.05
Job resources	.39**
Growth Opportunity	.23**
Organizational Support	.27**
Social Support	.27**
Job Insecurity	-.13*
Advancement	.34**

*p < .05, **p < .01

Discussion

The results of this study showed the subjects perceived their job demand in six tertiary care hospitals at a moderate level (\bar{x} = 16.53, SD = 2.99) (Table2). This result was consistent with the previous studies of Rothmann and Jordaan (2006), Coetzer and Rothmann (2007), and Rothmann and Joubert (2007) in South Africa. One possible explanation would be the high occupancy rates in the six tertiary care hospitals. According to the Thanh Hoa Provincial Department of Health (TPDOH) (2012), all of these hospitals had high occupancy rates, which were from 130 -145. On the night shift at these rates, one nurse has to take care of 20 to 30 patients, depending on each department, and during daytime, the nurse-patient ratio is about 1:10. As a result, high workload may cause nurses stress and burn out. In addition, the demographic results may contribute to the moderate level of job demands. The majority of the subjects were female (83.81%) (Table 1). On the other hand, the majority of the subjects graduated from secondary level of education (49.72%) (Table1). Quang (2012) stated that female and people who had lower educational level would have lower emotional load.

Moreover, the majority of subjects have been working for more than five years (50.57%) (Table1), so they can be able to adapt or cope with some problems in their work. As a result, subjects felt that they perceived job demand at a moderate level.

The results of this study showed that the subjects perceived their job resources in six tertiary care hospitals at a moderate level (\bar{x} = 97.30, SD=10.85) (Table 2). One possible explanation of the moderate level of job resources in this study is that the Vietnamese government recently had issued several news policies such as 07-Circular (MOH, 2011) in which nurses are given more empowerment, responsibilities, and areas of practice. This situation may lead nurses to feel more interested and independent in their work. However, working conditions in tertiary care hospitals still have many factors that make nurses feel unhappy and lack energy to work.

Among the five dimensions of job resources, the results showed that organizational support, social support, as perceived by subjects were at high levels. A reasonable explanation is that in the hospital setting board director hold weekly meetings with department and nursing managers



for work goals, plans and vision of the hospital (Hop, 2012). Moreover, in clinical setting, head nurses often have a responsibility for new nurses to help them obtain skills and knowledge. Head nurses usually check staff nurses' work every day and give feedback and guidance to nurses to help them improve their work. For new nurses, they would be trained at least three months by senior nurses to help them work, gain experience, and understand the responsibilities of their duty (Phan, 2010). Furthermore, nurses receive feedback and guidance from colleagues and team members. However, this study found out that job insecurity was perceived by staff nurses at a high level. This result may be because subjects were sometimes dissatisfied with their work. In the clinical setting, all nurses have to follow the strict rules and regulations within the organization; for example, nurses cannot easily change their shifts. Additionally, unit rotation for staff nurses is most frequently done by the administration. Hence, nurses cannot choose units of interest, and they have to work wherever they are assigned.

The results showed that growth opportunity and advancement as perceived by the subjects were at a moderate level. These results were consistent with the previous studies of Rothmann and Jordaan (2006), Coetzer and Rothmann (2007), and Rothmann and Joubert (2007) in South Africa. A reasonable explanation would be financial problems; the hospital managers had not provided enough expenditure for nurses to access training courses or attend nursing conferences to update their skills. Furthermore, the demographic data showed a

high percentages of married subjects (77.56 %), and the majority of the subjects were female (83.81%) (Table1). Influenced by Vietnamese culture, Vietnamese women have responsibilities to take care of their families. They cope with many challenges related to taking care of children and financial issues. This situation could lead them to encounter difficulties to participate in training courses or continuing education and less chance to update their knowledge or their skills. In addition, nurses' income is also very low when compared to other professionals in Vietnam. New nurses only receive an average of 115 USD (2,300,000 VND) per month, and ranking of income for nurses is 17 out of the 18 professional categories in Vietnam, higher than only general labor (Statistics, 2011). The current starting monthly salary scheme for newly appointed nurses in Vietnam is 52 USD (1,050,000 VND). Moreover, the inflation in 2013 was still very high (6.6%) (The General Statistic Office, 2013). The imbalance between income and inflation lead nurses to worry about their personal and family finances.

The results of this study showed that the overall score and all three dimensions of work engagement were at average level (Table 3). The results of this study were consistent with the previous studies of Laschinger, Wilk, Cho, and Greco (2009) in Canada and with Garrosa, Nez, Rodriguez-Munoz, and Rodriguez-Carvajal (2011) in Spain. However, the results of this study were incongruent with Othman and Nasurdin (2011), who reported high levels of work engagement as perceived by nurses in three public hospitals in Peninsular Malaysia. This inconsistency might be due to the different



setting and circumstances between Peninsular Malaysia and Thanh Hoa. The development of the economy in Malaysia is higher than in Vietnam. One possible explanation of the average level of work engagement in this study is the performance feedback of nursing work. According to Schaufeli and Bakker (2009), performance feedback of nursing work is one of the positive factors affecting nurses' perception of work engagement. The nurses might get positive performance feedback and high respect from patients. Thus, they "act from their heart" and show care, patience, kindness, empathy, sympathy, and happiness; they view patients' happiness as one of the goals of nursing care and have a sense of significance from their work and feel enthusiastic from patient recovery. In addition, the majority of the subjects were married (Table 1). According to Othman and Nasuridin (2011), married nurses were highly engaged in their work compared to unmarried nurses. Moreover, a majority of the subjects have been working for more than five years (Table 1). Wonder (2011) indicated that nursing experience in any clinical setting was significantly associated with total engagement. However, high workload leads to nurse's stress, burn out and a lack of willingness to do their work. Duty nurses in these hospitals have to work 12-24 hours/shift. On the night shift, one nurse has to take care of 20 to 30 patients depending on each department, and during daytime, the nurse-patient ratio is about 1:10 (Thanh et al., 2010). Furthermore, lack of autonomy makes nurses lack energy to work. In clinical practice, nurses could do only some basic procedures such as measuring vital signs and cleaning wounds without orders from

doctors because a lot of decision-making situations were described in hospital practicing instructions (Thanh, 2008). Besides, Muc (2011) claimed that almost 50% of nurses' time was spent on paperwork or financial issues that lead nurses to feel that they only do boring, routine tasks.

The results of this study demonstrated that there was no relationship between job demands and work engagement (Table 4). The results of this study are inconsistent with the previous studies of Hakanen, Bakker, and Demerouti (2005), Rothmann and Jordaan (2006), Coetzer and Rothmann (2007), and Rothmann and Joubert (2007); these studies showed job demand had a negative relationship with work engagement. The results of this study are inconsistent with the study of Gabr and El-Shaer (2013), which showed a positive relationship between job demand and work engagement. This current study showed that job demand had no relationship with work engagement. A possible explanation might be that nurses in Vietnam have been resilient because of having to adapt many changes within the nursing field. As previously mentioned, the Vietnamese Nurse Association was established in 1990 to promote nurses to have a higher position in society and the nursing profession has got more consideration and investment from the government not only in regards to facilities but also human resources. Therefore, nurses do not feel the effects of job demand.

The results of this study demonstrated that job resources had a significant positive moderate relationship with work engagement as perceived by the subjects ($r = .39$; $p < .01$)



(Table 4). The results are consistent with the previous studies of Hakanen, Bakker, and Demerouti (2005), Rothmann and Jordaan (2006), Coetzer and Rothmann (2007), Rothmann and Joubert (2007), and Gabr and El-Shaer (2013). The findings of these studies supported that there is a positive relationship between job resources and work engagement. Bakker and Demerouti (2007) proposed that job resources stimulate and forward the willingness to dedicate one's efforts and abilities to work tasks. An increase in job resources implies that the organizations or hospitals will provide nurses with an opportunity to enhance their skills, abilities, optimal challenges, freedom in their work, and positive feedback; as a result, nurses will be energetic, willing and proud to deliver quality work. These feelings cause nurses to be more engaged in their work. Thus, when the job resources increase, work engagement should also increase. This study also showed that organizational support is significantly positively related to work engagement ($r = .27, p < .01$). According to organizational support theory, mutual commitment between employees and employers begins with the organization providing a supportive and caring atmosphere for employees and employers. Employees respond by feeling attached, being more engaged, and actively participating to achieve organizational goals. Therefore, when nurses receive good organizational support, they will respond by being engaged in their work. According to Demerouti et al (2001), job resources plays an extrinsic motivational role when they are instrumental in achieving work goals. Moreover, growth opportunity is significantly positively

related to work engagement ($r = .23, p < .01$). Growth opportunity refers to variety in work, opportunities to learn and independence in work. This means that growth opportunity plays an intrinsic motivational role by encouraging employees' growth, learning, and development. This finding is supported by Schaufeli and Baker (2004), who showed that if employees are provided with opportunities to learn and independence in work, they will be more likely to be engaged in their work. In addition, job insecurity is a negatively associated with work engagement. This result regarding job insecurity was consistent with Hakanen et al (2005), which showed that job insecurity is weakly negatively related to work engagement, and employees found it difficult to be engaged in their work if they feel insecure. Finally, advancement is positively associated with work engagement. This implies that the nurses are more engaged in their work if they receive salaries enough to live comfortably.

Conclusions and Implications

The results of the study showed that the subjects perceived their job demands and job resources at moderate levels. The overall score of work engagement was at an average level. There was no relationship between job demands and work engagement. On the other hand, job resources showed a significant positive moderate relationship with work engagement.

The results of the study provide valuable information to nurse managers in six tertiary care hospitals to holistically understand the relationship between job demands, job resources, and work engagement among nurses.



Hence, nurse managers can develop proper strategies to reduce job demand and increase job resources in order to encourage work engagement.

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