

# การศึกษาเปรียบเทียบการรับรู้ความเครียด การปรับตัว การรู้สึกมีคุณค่าในตนเองและการกลับสู่ภาวะปกติของนักเรียนพยาบาลเหล่าทัพ สาธารณรัฐเกาหลี และนักเรียนพยาบาลทหารอากาศ วิทยาลัยพยาบาลทหารอากาศ

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## บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์ เพื่อ 1) เปรียบเทียบการรับรู้ความเครียด การปรับตัว การรู้สึกมีคุณค่าในตนเองและการกลับสู่ภาวะปกติของนักเรียนพยาบาลเหล่าทัพ สาธารณรัฐเกาหลี และนักเรียนพยาบาลทหารอากาศ วิทยาลัยพยาบาลทหารอากาศ และ 2) ศึกษาความแตกต่างของการรับรู้ความเครียด การปรับตัว การรู้สึกมีคุณค่าในตนเองและการกลับสู่ภาวะปกติของนักเรียนพยาบาลเหล่าทัพ สาธารณรัฐเกาหลี และนพอ. จำแนกตาม ชั้นปีที่ศึกษา การมีเพื่อนชาย ที่ปรึกษาและปัญหาสุขภาพ การวิจัยนี้เป็นการวิจัยเชิงพรรณนา ตัวอย่างประกอบด้วย นักเรียนพยาบาลเหล่าทัพ 264 คน และนักเรียนพยาบาลทหารอากาศ 196 คน เครื่องมือที่ใช้ในการวิจัยประกอบด้วยแบบสอบถาม 4 ชุด คือการรับรู้ความเครียด การปรับตัว การรู้สึกมีคุณค่าในตนเองและการกลับสู่ภาวะปกติ การเก็บข้อมูลเกิดขึ้นหลังได้รับอนุญาตจากนักเรียนพยาบาลเหล่าทัพและนักเรียนพยาบาลทหารอากาศ สถิติที่ใช้ คือ t-test และ ANOVA

ผลการวิจัยพบว่า 1) การรับรู้ความเครียด การปรับตัว การรู้สึกมีคุณค่าในตนเองและการกลับสู่ภาวะปกติของนักเรียนพยาบาลเหล่าทัพ สาธารณรัฐเกาหลี และนักเรียนพยาบาลทหารอากาศ วิทยาลัยพยาบาลทหารอากาศแตกต่างกัน อย่างมีนัยสำคัญทางสถิติที่ระดับ .001 2) การรับรู้ความเครียดของนักเรียนพยาบาลทหารอากาศจำแนกตามชั้นปีที่ศึกษา การมีเพื่อนชาย การมีที่ปรึกษาและปัญหาสุขภาพ ไม่แตกต่างกัน แต่แตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 เมื่อจำแนกตามปัญหาสุขภาพ การรู้สึกมีคุณค่าในตนเอง จำแนกตามชั้นปีที่ศึกษา แตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ .01 คือชั้นปีที่ 4 แตกต่างจากชั้นปีที่ 1 และ 3 จำแนกตามการมีเพื่อนชาย แตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ .01 จำแนกตามการมีที่ปรึกษา การรับรู้ความเครียด การปรับตัว การรู้สึกมีคุณค่าในตนเองและการกลับสู่ภาวะปกติไม่แตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 3) การรับรู้ความเครียดของนักเรียนพยาบาลเหล่าทัพ สาธารณรัฐเกาหลี จำแนกตาม ชั้นปีที่ศึกษา การมีเพื่อนชาย การมีที่ปรึกษาและปัญหาสุขภาพ ไม่แตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 การปรับตัวจำแนกตาม การมีเพื่อนชาย แตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 การรู้สึกมีคุณค่าในตนเอง จำแนกตามชั้นปีที่ศึกษา การมีเพื่อนชาย การมีที่ปรึกษาและปัญหาสุขภาพ ไม่แตกต่างกัน การกลับสู่ภาวะปกติจำแนกตามการมีที่ปรึกษา แตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ .05 จากผลการวิจัย การมีที่ปรึกษาจะช่วยให้นักเรียนปรับตัว การรู้สึกมีคุณค่าในตนเอง และช่วยให้การกลับสู่ภาวะปกติเกิดขึ้นเร็ว จึงควรส่งเสริมให้ระบบที่ปรึกษามีความเข้มแข็งในสถาบันการศึกษาพยาบาล และนักเรียนที่มีสุขภาพดีส่งเสริมให้เกิดการปรับตัวดี จึงควรดูแลเอาใจใส่สุขภาพของนักเรียนเพื่อช่วยให้เกิดการปรับตัวที่ดี ควรพัฒนาเทคนิคการผ่อนคลาย เพิ่มการจัดสนทนากาให้พอเพียงเพื่อคลายความเครียด และช่วยให้เกิดการปรับตัวที่ดี

**คำสำคัญ :** ความเครียด การปรับตัว การรู้สึกมีคุณค่าในตนเองและการกลับสู่ภาวะปกติ

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# A Comparative Study of Perceived Stress, Adaptation, Self-esteem, and Resilience of the Armed Forces Nursing Academy Cadets, Republic of Korea and the Royal Thai Air Force Nursing College, Student Nurses, Thailand

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The objectives of this study were 1) to compare perceived stress, adaptation, self-esteem, and resilience of AFNA Cadets, and RTAFNC student nurses and 2) to investigate the differences of perceived stress, adaptation, self-esteem, and resilience of AFNA Cadets, and RTAFNC, student nurses classified by general characteristic of grade, having boyfriend, mentor and health problems. Descriptive study was carried out. Samples composed of 264 A.F.N.A. cadets, and 196 RTAFNC. student nurses. Research instrument was composed of 4 sets of questionnaires of stress, adaption, self-esteem and resilience. Data were gathered at A.F.N.A and RTAFNC after receiving permission. 264 AFNA Cadets and 196 RTAFNC student nurses were asked to fill out the questionnaires. T-test and one way analysis of variance were used for data analyses.

The research results were as follows: 1) Perceived stress, adaptation, self-esteem and resilience of A.F.N.A cadets and RTAFNC SN were found significantly different at  $p < .001$ . 2) Mean scores of perceived stress of RTAFNC student nurses were not significantly different when classified by grade, having boyfriend, mentor and health problem. Mean scores of adaptation were significantly different when classified by health problem at  $p < .05$ . Mean scores of self-esteem when classified by grade revealed grade 1, 3 and 4 differed from grade 4. Besides, mean score differences of self-esteem classified by having boyfriend were significantly different at  $p < .05$ . Having mentored and no mentor had shown no significant difference between perceived stress, adaptation, self-esteem, and resilience. Health problem and no health problem indicated no significant different mean scores of adaptation. 3) Perceived stress of AFNA cadets were not significantly different when classified by grade, religious practice, boyfriend, mentor and health problem. Mean scores of adaptation when classified by having boyfriend were found significantly different at  $p < .05$ . Mean scores of self- esteem were not significantly different when classified by grade, religion, boyfriend, mentor and health problem. Mean scores of resilience were significantly different when classified by mentor at  $p < .05$ . The research results indicated that mentors play a vital role in the increment of adaptation, self-esteem and resilience. As a consequence, mentor system should be strengthening in the military nursing academy. Besides, health status takes effect on adaptation, thus the student nurses who had health problems were likely to have lower scores of adaptation. Therefore military nursing academies should promote healthy status to all cadets and student nurses during their studying. Relaxation techniques and recreation should be provided sufficiently to the cadets and student nurses.

**Keywords :** Stress Adaptation Self-esteem Resilience

## Background of the study

The military nursing academies in Thailand and The Republic of Korea are undergraduate schools that offer a Bachelor Degree of Sciences in Nursing (BSN) with a curriculum intended to prepare graduates for entry into professional nursing practice as a Registered Nurse (RN) serving their armed forces nations. One of the military nursing academies in Thailand is The Royal Thai Air Force Nursing College (RTAFNC) that was founded in 1958. The main purpose is to produce military nurse officers to serve in the Royal Thai Air Force in peace and war, and provide nursing care during calamity, insurgency and chaos. The curriculum has been developed overtime. Starting in academic year 2013, the RTAFNC, student nurses have to attend theory and practice, which has 140 credits for Bachelor of Nursing Science program that requires four years of studying. In the first year, basic science and basic nursing courses provide a total of 42 credits. Second Year is focused on basic nursing subjects and nursing professional subjects have 38 credits, which include Adult Nursing, Geriatric Nursing and Pediatric Nursing. Third Year is focused on Obstetric Nursing, Psychiatric Nursing and Disaster Nursing. Total credits are 37 credits. Fourth Year is focused on Community Health Nursing and Elementary Flight Nursing, they are trained for air evacuation by C-130. Supplementary activities were added in the program such as military training, jungle survival and sports.

The Armed Forces Nursing Academy (A.F.N.A) is a special university which trains the nursing officers of the future. Nursing officers are both officers and specialists in the field of nursing. They dedicate themselves to maintaining and improving the health of the military service personnel. For this reason, nursing officers have to serve the country as officers and nurses. The A.F.N.A also offers the best educational environment for the future nursing officers. It is better than any other organization when it comes to training and education for nursing officers. The A.F.N.A produces many influential people in the field of nursing. The A.F.N.A is the stepping-stone for women who want to realize their dream of becoming nursing officers like Nightingale.

The A.F.N.A provides a nursing science program designed to offer university level nursing programs such as introduction to nursing science, fundamentals of nursing science, advanced courses for specialization and core/elective nursing, enhancing cadets' professional knowledge and skills required for the nursing profession. The curriculum has been developing overtime and in 2013 the curriculum graduation requirements became 155 credits. The cadets have to attend core liberal arts 26 credits, fundamental course and major science 109 credits. Military nursing, military theory and military training 32 credits. English intensive program and discipline, ethic training 27 credits. Elective subjects 6 credits. The objectives are to understand the culture and history of western history, understanding the social and economic values, which involves social psychology and educational psychology. Besides, the objective of the electives subject is to understand politics and law.

According to the research report on the stress among undergraduate students, high level of stress is believed to affect students' health and academic performance (Phuekphan, 2012). Evan and Kelly (2004) revealed that student nurses had more stress than other college students due to final examinations, research papers and other assignments. Mahat (1998) studied stress in junior student nurses; he found that the student nurses perceived stressor in the clinical setting since was caused by having to prepare their work assignments before they went to work on the wards. Beck and Srivastava (1991) investigated the perception of level and sources of stress in student nurses in the various years of the baccalaureate nursing program. Results showed that the students experienced high stress levels and that they are at risk of having a physical or psychiatric illness. Sheu, Lin and Hwang (2002) indicated stress of the student nurses came from the lack of professional knowledge, skill and caring of the patients. Nolan and Ryan (2008) stated that the main sources of stress among student nurses were associated with relationships in the clinical environment, clinical workload and responsibility, clinical and academic demands. The research report on stress of the AFSN in 2012, data were collected from 50 AFSN, who enrolled in year one. It was found that the stress level was more than moderate at 26.53% Kasemsuk (2012). Lo, R (2002) investigated a longitudinal study

of perceived level of stress, coping and self-esteem of undergraduate nursing student: an Australian case study revealed that the students in year one experienced significantly less transient stress as compared with year two. Students in year three had more positive self-esteem than year 2. Chronic transient stresses were significantly correlated with avoidance coping behaviors and negative self-esteem. Positive self-esteem was significantly correlated with proactive coping behaviors. Lazarus and Folkman (1984) link stress-related variables to health related outcomes. All of their constructs in the transactional model, when taken together, affect adaptation outcomes. They propose three types of adaptation outcomes, 1. Functional in work and social living, 2. Moral or life satisfaction and 3. Somatic health. Roy (1984) stated that ineffective coping results in illness whereas adaptive coping results in health issues. Many student nurses who had stress put more effort and try harder to adjust to a new environment of academic life (Patra Phuekphan, 2012).

Many A.F.N.A. cadets and RTAFNC, student nurses encountered stress circumstances due to learning activities that they had to take up. Excessive stress can be harmful to physical and psychological health. As a result, it affects achievement, learning ability and nursing practice training. Thus they have to adapt to overcome the stressors so that they can balance their lives during studying.

When the student nurses had stress, they tried to cope with adverse conditions until they recovered from adversity. Research on human resilience has been done in order to understand how certain individuals, when faced with challenges and risk factors or stressors, are able to recover without psychological harm and develop into confident, competent, caring adults (Huber & Mathy 2002). Resilience has become an appealing concept because of its roots in theoretical models of positive psychology that seek to explore factors that enable individuals to successfully overcome adversity (Kaplan 1999).

Even though the A.F.N.A. cadets and the RTAFNC student nurses had stress they had to overcome adverse conditions in order to meet their goals of their studying. They needed well adaptation, encourage self-esteem and resilience. Some

general characteristics, such as religious practice, could affect adaption, self-esteem and resilience. According to previous studies relating to stress, adaptation, self-esteem and resilience of the A.F.N.A. cadets and RTAFNC student nurses was found in a few studies. Therefore, this study was needed to investigate this for better understanding.

## **Objectives**

The objectives of the study are:

1. To compare perceived stress, adaptation, self-esteem, and resilience of A.F.N.A. cadets, and RTAFNC student nurses.
2. To investigate the differences of perceived stress, adaptation, self-esteem, and resilience of A.F.N.A cadets, and RTAFNC, student nurses and classify by general characteristics of grade, boyfriend, mentor and health problems.

### **Questions of the study:**

1. Did A.F.N.A cadets and RTAFNC, student nurses' perceived stress, adaptation, self-esteem, and resilience differently?
2. Did general characteristics of A.F.N.A. cadets, and RTAFNC student nurses make the differences on perceived stress, adaptation, self-esteem, and resilience?

### **Definition**

**Stress** refers to reaction to an event in which the body activates a number of physical and behavioral defense mechanism to deal with impending threat and the body's reaction to change that requires physical, mental, or emotional adjust or respond.

**Adaptation** is defined as the changes of behavioral feature that suited to its surrounding or environment and to survive in its situation.

**Self-esteem** refers to a feeling of having respect for oneself and abilities and realistic respect for favorable impression of oneself.

**Resilience** is defined as an effort to recognize, define, and measure the capacity of the individual to endure and develop in the context of adverse conditions and to recognize the individual's ability to recover from adversity.

### **Benefit of the study**

1. This study would provide information for the institutions in response to release of the A.F.N.A. cadets, and RTAFNC student nurses' stress, promote adaptation, self-esteem and resilience.

2. The results of the study would reveal problems found in common which help nurse instructors understand and find out the suitable strategies to solve the problems.

3. The study could be the guideline for the future plan to create a sound activity to promote physical and psychological well-being.

### **Method**

#### **Study and Sample**

Descriptive study was carried out. Samples composed of 264 A.F.N.A cadets, and 196 RTAFNC student nurses.

#### **Research instrument**

Research instrument of this study composed of 4 sets of questionnaires which sought to understand stress, adaption, self-esteem and resilience of A.F.N.A. cadets, and 196 RTAFNC student nurses. Questionnaires of stress was developed by Ko, S.T. (2004). Questionnaire of adaptation was developed by Baker and Siryk (1984) and was revised by South Korean Air Force. Questionnaire of self-esteem was developed by Rosenberg (1965) and was called "Rosenberg self-esteem scale" Resilience was developed by Block and Kremen (1996).

### **Data collection**

Data were gathered at A.F.N.A and RTAFNC after receiving permission to collect data by using 4 sets of questionnaires to assess perceived stress, adaptation, self-esteem and resilience. 264 A.F.N.A Cadets and 196 RTAFNC student nurses who agreed to participate in the study were asked to fill out the questionnaires after receiving permission by informed consent from.

### **Data analysis**

Three major sets of analysis were performed. First frequency was calculated for discrete variable. Second mean and standard deviation were calculated for all continuous variables. Third, comparison mean scores of the two groups' independent variables used t-test to compute data of A.F.N.A. cadets, and RTAFNC student nurses' perceived stress, adaptation, self-esteem and resilience. Comparison mean scores of more than two groups' independent variables were examined by Analysis of Variance (f-test) of general characteristic of A.F.N.A. cadets, and RTAFNC student nurses toward perceived stress, adaptation, self-esteem and resilience.

## **Results of the study**

### **Demographic characteristic of the subjects**

The demographic characteristic of the samples are presented in Table 1. The average age of A.F.N.A cadets were 20.1, RTAFNC student nurses were 19.9. AFNA cadets 1st grade were 31.1%, 2<sup>nd</sup> grade were 24.2%, 3<sup>rd</sup> grade were 22.7% and 4<sup>th</sup> grade were 22.0%. RTAFNC students 1<sup>st</sup> grade were 25.5%, 2nd grade were 25.5%, 3<sup>rd</sup> were 25% and 4<sup>th</sup> grade were 24%. The majority of AFNA cadets were Christian 27.3 % whereas almost of the RTAFNC student nurses were Buddhists 98.5%. Time of religious practice of A.F.N.A cadets and RTAFNC student nurses were 30 minutes and 4 hours respectively. Having a boyfriend of A.F.N.A cadets was 29.9% and RTAFNC student nurses was 25.1%. The majority of AFNA cadets had no mentor 68.2%, but the majority of RTAFNC student nurses had a mentor

96.9%. The majority of health problems of AFNA cadets had no health problems 87.1% and RTAFNC student nurses had no health problems 66.2%.

The Comparison of A.F.N.A cadets, and RTAFNC, student nurses perceived stress, adaptation, self-esteem and resilience are shown in Table 2. The comparisons were calculated by independent t-test. It was found all variables were significant different, perceived stress ( $t = 18.05, p < .001$ ), adaptation ( $t = 92.88, p < .001$ ), self-esteem ( $t = 14.01, p < .001$ ), resilience ( $t = 555.07, p < .001$ ).

The comparisons mean scores of perceived stress, adaptation, self-esteem, and resilience classified by general characteristics of RTAFNC student nurses were presented in Table 3. The comparisons of mean scores were computed by t-test for two groups of independent variables and one way analysis of variance (f-test) for more than two groups of independent variables. The results revealed no significant different of the mean scores of perceived stress. Comparison mean scores of adaptation were significant different when classified by health problem ( $t = 4.52, p < .05$ ). Comparison mean scores of self-esteem when classified by grade revealed grade 4 differed from grade 1, and 3. Besides, the differences mean score of self-esteem of RTAFNC student nurses classified by having and no having boyfriend determined the differences of the two groups. Having mentored and no mentor had shown no significant different between two groups' mean scores of perceived stress, adaptation, self-esteem, and resilience. Health problem and no health problem indicated significant different two groups' mean scores of adaptation.

**Table 1** Homogeneity Test of A.F.N.A cadets and RTAFNC student nurses

Variable		AFNA cadets (n=264)		RTAFNC SN (n=196)		t or $\chi^2$	P
		n (%)	or M $\pm$ SD	n (%)	or M $\pm$ SD		
Age	(years)	20.1	$\pm 1.3$	19.9	$\pm 1.3$	2.19	.139
Grade	1 <sup>st</sup>	82	(31.1)	50	(25.5)	1.72	.633
	2 <sup>nd</sup>	64	(24.2)	50	(25.5)		
	3 <sup>rd</sup>	60	(22.7)	49	(25.0)		
	4 <sup>th</sup>	58	(22.0)	47	(24.0)		
Religion	Yes	159	(60.2)	196	(100.0)	101.01	<.001
	Christian	72	(27.3)	1	(0.5)		
	Catholic	47	(17.8)	0	(0.0)		
	Buddhist	40	(15.2)	193	(98.5)		
	Others	0	(0.0)	2	(1.0)		
	No	105	(39.8)	0	(0.0)		
Time of religion	(times/week)	0.5	$\pm 0.7$	4.0	$\pm 2.7$	404.17	<.001
Boy Friend	Yes	79	(29.9)	49	(25.1)	1.28	.293
	No	185	(70.1)	146	(74.9)		
Mentor	Yes	84	(31.8)	190	(96.9)	198.06	<.001
	No	180	(68.2)	6	(3.1)		
Health Problem	Yes	34	(12.9)	66	(33.8)	28.94	<.001
	No	230	(87.1)	129	(66.2)		

**Table 2** Comparison of A.F.N.A cadets and RTAFNC student nurses' perceived stress, adaptation, self-esteem and resilience

Variables	AFNA cadets (n=264)		RTAFNC student nurses (n=196)		t	P
	M±SD					
Perceived stress	1.97	±0.43	2.13	±0.31	18.04	<.001
Adaptation	5.43	±0.73	6.08	±0.68	92.99	<.001
Self esteem	3.04	±0.44	3.18	±0.38	14.01	<.001
Resilience	2.56	±0.48	3.47	±0.29	555.07	<.001

**Table 3** The comparison mean scores of, perceived stress, adaptation, self-esteem, and resilience classified by general characteristics of RTAFNC student nurses

Variables		Perceived stress		t/F	Adaptation		t/F	Self esteem		t/F	Resilience		t/F
		M±SD		(p)	M±SD		(p)	M±SD		(p)	M±SD		(p)
Grade	1st <sup>a</sup>	2.06	±0.29	1.31	6.12	±0.77	2.42	3.26	±0.34	5.65	3.50	±0.30	1.40
	2nd <sup>b</sup>	2.15	±0.30	(.0274)	6.22	±0.57	(0.068)	3.29	±0.35	(.001)	3.46	±0.27	(.244)
	3rd <sup>c</sup>	2.18	±0.35		5.87	±0.72		3.15	±0.42	*ac>d	3.40	±0.30	
	4th <sup>d</sup>	2.13	±0.31		6.10	±0.61		3.02	±0.34		3.51	±0.27	
Boy	Yes	2.17	±0.32	1.13	6.01	±0.75	0.61	3.06	±0.36	7.12	3.44	±0.26	0.83
Friend	No	2.11	±0.31	(.290)	6.10	±0.66	(.436)	3.22	±0.37	(.008)	3.48	±0.30	(.362)
Mentor	Yes	2.12	±0.31	1.95	6.09	±0.68	0.96	3.18	±0.38	0.11	3.47	±0.29	0.02
	No	2.31	±0.38	(.165)	5.81	±0.70	(.329)	3.13	±0.41	(.745)	3.45	±0.35	(.886)
Health	Yes	2.16	±0.29	0.82	5.93	±0.72	4.52	3.18	±0.38	0.01	3.44	±0.32	1.20
Problem	No	2.12	±0.33	(.368)	6.15	±0.65	(.035)	3.18	±0.37	(.910)	3.49	±0.27	(.275)

\* Sheffe's post-hoc test

The comparisons of perceived stress, adaptation, self-esteem, and resilience classified by general characteristics of AFNA cadets were presented in Table 4.

**Table 4** Comparison mean scores of Adaptation, perceived stress, self-esteem, and resilience according to general characteristics of A.F.N.A cadets.

Variables		Perceived stress		t/F	Adaptation		t/F	Self esteem		t/F	Resilience		t/F
				(p)			(p)			(p)			(p)
		M±SD			M±SD			M±SD			M±SD		
Grade	1st	2.04	±0.47	2.33	5.41	±0.69	0.64	3.07	±0.41	0.64	2.61	±0.47	2.39
	2nd	1.95	±0.44	(.075)	5.37	±0.80	(.589)	3.00	±0.51	(.589)	2.49	±0.50	(.069)
	3rd	2.02	±0.34		5.41	±0.73		2.99	±0.44		2.48	±0.45	
	4th	1.86	±0.43		5.54	±0.73		3.07	±0.41		2.67	±0.47	
Boy	Yes	1.96	±0.48	-0.33	5.61	±0.71	2.70	3.08	±0.44	0.95	2.61	±0.50	0.98
Friend	No	1.98	±0.41	(.743)	5.35	±0.73	(.007)	3.02	±0.44	(.345)	2.54	±0.47	(.328)
Mentor	Yes	1.91	±0.36	-1.81	5.60	±0.71	2.57	3.14	±0.39	2.69	2.67	±0.46	2.54
	No	2.00	±0.46	(.072)	5.35	±0.73	(.011)	2.99	±0.45	(.008)	2.51	±0.48	(.012)
Health	Yes	2.04	±0.41	0.89	5.21	±0.78	-1.86	2.96	±0.46	-1.11	2.46	±0.54	-1.33
Problem	No	1.97	±0.43	(.375)	5.46	±0.72	(.065)	3.05	±0.44	(.268)	2.58	±0.47	(.185)

It was found mean scores of perceived stress were not significant different when classified by grade, religious practice, boyfriend, mentor and health problem. Comparisons mean scores of adaptation of AFNA cadets classified by having boyfriend and no having boyfriend were found significant different ( $t = 2.70$ ,  $p < 0.05$ ). Comparisons mean scores of self-esteem were not significant different when classified by grade, religion, boy Friend, mentor and health problem. Comparisons mean scores of resilience were significant different when classified by mentor ( $t = 2.54$ ,  $p < .05$ ).

## Discussion

This study compared the differences in mean scores of perceived stress, adaptation, self-esteem, and resilience of A.F.N.A cadets and RTAFNC student nurses and to investigate the differences mean scores of perceived stress, adaptation, self-esteem, and resilience of A.F.N.A Cadets, and RTAFNC, student nurses classify by general characteristic of grade, boyfriend, mentor and health problems.

Perceived stress between A.F.N.A Cadets and RTAFNC student nurses were significant different ( $t = 92.88, p < .001$ ). Since, learning activity of Bachelor of Nursing Science Program of each institution is different. Teaching and learning both theory and practice of RTAFNC student nurse had less learning material than A.F.N.A. The RTAFNC student nurses had to seek for knowledge, skill, doing assignment and prepared themselves for clinical practice since they were in grade 2<sup>nd</sup> where as A.F.N.A cadets had more learning material, they could manage themselves to practice nursing procedure inside A.F.N.A efficiently. On the other hands, RTAFNC student nurse had to do their assignment and research paper within time constraint. These could trigger their perceived stress levels higher than A.F.N.A cadets. A study of Sheu, Lin, & Hwang (2002) revealed the students lacked of body of professional knowledge and skills, they cannot provide good care as well, in addition they must perform procedures that caused serious harm to their patients. The environmental stressor among freshmen students was placed in unusual situation because they needed to adjust themselves in new surrounding environment. But sophomore perceived stress on changing in living environment less than freshman. Sources of stress among junior was lived in messy conditions whereas senior student nurses perceived vacation or break as a stress which caused by the limitation of time for them before graduating from school (Phuekphan, 2012).

Comparisons of the adaptation between A.F.N.A Cadets and RTAFNC student nurses were found significant different ( $t = 18.05, p < .001$ ). The research results indicted the cadets who had no mentor had lower adaptation scores than the cadets who had mentors. Mentors played a vital role in many aspects which included provided counseling to the students. The counseling system of RTAFNC allows the student nurses to share their thought and uncomfortable feeling to their mentors. As a consequence, they felt more comfortable and could cope with undesired situation and finally adapted to the situation they were living with. Besides, RTAFNC student nurses had to practice religious activities every evening at the meeting point. Moreover, the senior student nurses were assigned to take care and assisted first year, second year and third year to solve the problems. These could help RTAF,

student nurses cope and adapt to difficulty situation that caused stress. The study of the effect of reality group therapy on adaptation behavior with stress of first year RTAF, student nurses by Kasorn Kasemsuk (2012) revealed RTAF, first year student nurses had positive adaptation behaviors after participated in the program. According to the study on Mindfulness Based Stress Reduction, Psychological Symptoms, Quality of life of Sunyoung Kim, Ho Jin Lee and Hye Jeong Hong, (2013), the study was designed to examine the effect of Mindfulness based stress reduction on psychological symptoms and quality of cadet life at A.F.N.A Methods was a quasi-experimental study with a non-equivalent control group pre-posttest design. Participants were 65 1st and 2nd grade A.F.N.A cadets who were assigned to the 1st and 2nd company. The experimental group had significantly lower scores on psychological symptoms of anxiety and higher scores on quality of cadet life in a domain of psychology compared to the control group. This program is an effective nursing intervention to decrease stress in A.F.N.A cadets. These studies confirmed that the students of the two intuitions had high level of stress but they could decrease stress and had positive adaptation behaviors. However, the research results defined that RTAFNC, student nurses who had health problem had lower scores of adaptation that those who had no health problem.

The comparison of self-esteem between A.F.N.A Cadets and RTAFNC student nurses were found significant different ( $t = 14.01, p < .001$ ). The research results revealed the differences of self-esteem of A.F.N.A cadets and RTAFNC, student nurses due to the differences of having mentors and health problems. Self-esteem is an important aspect for human being, it reflects overall emotional evaluation of own worth. The student holding of a good opinion of oneself can cope with any stress situations such as the hardship of learning process (Garmezy, 1991). From the study of Dumont & Provost (1999), investigated adjusted, resilient among adolescents, it was found adolescents who had well-adapted had higher self-esteem and adolescents who had more resilient had higher self-esteem. These finding congruence with the study of Puskar KR, Bernardo LM, Ren D, Haley TM, Tark KH, Switala J, Siemon L. (2010). They stated that self-esteem and optimism have been

broadly examined and are associated with health-practices, social interaction, attachment, resiliency, and personal identity.

The comparison of resilience between A.F.N.A cadets and RTAFNC student nurses were found significant different ( $t = 555.07, p < .001$ ). The research results indicated that cadets who had mentors had higher score of resilience than the cadets who had no mentor. A previous study related to resilience on the influence of self-respect and empathy on the academic resilience of student nurses by Soon-Young Yoon, Myoung-Jin Kwon, Moon- Hee Gang (2013) revealed academic resilience was significantly difference according to the number of years in the program, health status, satisfaction with major, relationship with peers, personality, personal opinion on nursing, economic status, and satisfaction with allowance. Since, the A.F.N.A cadets and the RTAFNC, student nurses had differences in health status, and satisfaction with allowance they gained, these could lead to significant different in resilience.

## **Suggestions**

The research results indicated that mentors play a vital role in the increment of adaptation, self-esteem and resilience. As a consequence, a mentor system should be strengthened in the military nursing academy. Besides, health status takes effect on adaptation, thus the student nurses who had health problems were likelihood to have lower scores of adaptation. Therefore a military nursing academy should promote healthy status to all student nurses during their studying. Relaxation techniques and recreation should be provided sufficiently to the A.F.N.A cadets and RTAFNC student nurses.

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