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### Social Computing-based Analysis of the Effect of Club Activities on Students' Attitudes and Selfefficacy

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**Abstract**. In this study, attempts have been made to verify the variables which influence the career attitude maturity in order to lay the foundation for the development of an educational program which enhances the career attitude maturity during the participation in the club activities. This study is a descriptive research attempted to a total of 202 participants were surveyed. The data were analyzed by using the descriptive statistics, t-test, ANOVA, Pearson's correlation, and the multiple regression by using the SPSS 23.0 program. The self-regulation effectiveness and self-confidence applied to the subjects demonstrated a significant correlation in the positive direction for the career attitude maturity. The explanatory power of the model was confirmed to be 27.8%, respectively. Based on such results, efforts are needed to promote the self-regulation and self-efficacy in order for the nursing students to enhance their career attitude maturity, in the case of the nursing students in college participating in the club activities, particularly the volunteer activities, it is significantly meaningful in that the relationship between the academic self-efficacy and the career attitude maturity can be verified, and could also be applied to the college preparation process for fostering nurses.

**Keywords:** Club activities, nursing student, career attitude maturity, academic self-efficacy

#### 1. Introduction

Among the crucial tasks which the mankind is faced with in the course of growing up is the selection of career path, and college is an important time to prepare for the future job, and choose and decide the occupation (Kwon, H. J., et al., 2009). Since the career path we choose affects all aspects of life, such as the occupation and social status, the career path is all more important than simply choosing a job (Ko, B. S., et al., 2011). The extent of preparation and responsive behavior of an individual for the occupation related events which he or she encounters in the course of his or her life is called the "career attitude maturity" (Lee, S. H., et al., 2017). A person of the mature career attitude has an adequate understanding and judgment skills required to explore his or her own career path, and also choose a career path, while actively reflecting his or her career attitude maturity on the college life. Therefore, it can be known that they have a passion for personal work and a positive perception of themselves, as well as a sense of accomplishment and satisfaction with their job (Lee, S. H., et al., 2017).

As for Korea, the middle and high school students who are undergoing a crucial period in need of career preparations given the curriculum focused on the entrance exams are admitted to and enter the academic departments highly favored in and by the society without deeply considering their aptitudes or values, schools and academic departments in line with their parents' recommendations and grades (Kim, J. U., et al., 2012).

In particular, in the case of the nursing students, the number of admitted and enrolled students has recently increased in connection with the guaranteed rate of employment, and the nursing students, whose career path is determined at the same time as they enter college, often choose their career path without fully understanding themselves and analyzing their career path, thereby yielding such a high rate of turnover for the nurses (Jung, C. S., et al., 2018).

Therefore, an established career attitude maturity is necessary and essential for the nursing students to enhance their selection of career path, adjustment to their occupation, and the extent of satisfaction following graduation (Kim, J. U., et al., 2012). That club activities are important as a factor in changing the career attitude maturity has been emphasized (Im, H.J., et al., 2015). Club activities in college are among the extracurricular activities in college, and the students learn on their own and share their thoughts and experiences to teach and learn from each other, thereby exercising spontaneity and creativity, which could also be a major factor in facilitating the individual learning desire and facilitate growth.

A study by Hong (Song, M. S., et al., 2020) presented that the learners' various experiences gained from and through clubs increase their readiness for the self-directed learning skills, and also analyzed that the participation in club activities enhanced social interest and provided opportunities for the self-realization. Song and Lee (Choi, Y. H., 2017) claimed that the nursing students' club activities have had a

positive effect on their communication skills and self-leadership, and Ham (Bandura, A., 1977) claimed that the college students' club activities help them adapt to their college life, while Choi (Han, S. J., 2013) claimed that a study was confirmed that the career decision making self-efficacy increases, whereby the importance of club activities was confirmed. Academic self-efficacy is the self-confidence which the students experience in the situations related to academic performance, and is also a very important variable in explaining the individual achievement results and behaviors (Kang, S. H., 2010).

It was confirmed that the students with high academic self-efficacy have a high level of motivation to learn new situations, knowledge, and skills, and hence, they can make efforts to improve their academic achievements by choosing challenging tasks and persisting with difficult tasks (Yoo, J.Y. et al., 2015). The research results of Han (Yoo, J.Y. et al., 2015) confirmed that it has had an important influence on how individuals perform, and how they set goals in the selection process as well as their academic situation, while being a variable having a direct effect on the career attitude maturity.

Through such research results, it may be considered that the career attitude maturity of the nursing students is crucial since the adaptation of the nursing students to their major study program leads to the development of the nursing profession in the future. As for the studies related to the career attitude maturity which have been conducted to date, satisfaction of major program (Lee, K.H. et al., 1998), adaptation to college life (Park, P. N., 2017), and academic self-efficacy (Yoo, J.Y. et al., 2015) have primarily been studied, yet there are no studies conducted on the nursing students who have been and are participating in the club activities. Therefore, this study may be said to be necessary as it is considered that identifying and understanding the effects of academic self-efficacy of the nursing students participating in the club activities on the career attitude maturity could provide important information for the qualitative improvement for the career education of the nursing students.

In this study, attempts have been made to verify the variables which influence the career attitude maturity in order to lay the foundation for the development of an educational program which enhances the career attitude maturity during the participation in the club activities.

#### 2. Methodology

#### 2.1. Method of research

#### 2.1.1. Research design

This study is a descriptive correlation study which identifies and examines the career attitude maturity and academic self-efficacy of the nursing students participating in the club activities and the relationship between such variables.

#### 2.1.2. Research subjects and the data collection

The subjects of this study were the nursing students of nursing schools located in 2 cities in Gyeonggi-do and 2 cities in Gangwon-do, who were 202 people who understood the purpose of the study and provided a written consent for the participation. The number of subjects was calculated by using the G\*Power 3.1 program, and the minimum required number of samples was calculated to be 200 people based on the level of significance of .05, a median size of effect of .25, and a power of 80% required for one-way variance analysis, and hence, 202 people of the subjects of this study were satisfied.

The period of data collection ran from January 3, 2020 until March 30, 2020, and the data collection was explained to the Chairperson of the Department of Nursing at each college and university for the data collection and was approved and carried out. For the students, data were collected by using the structured questionnaires.

In consideration of the ethical aspects when data are collected, the purpose of this study, confidentiality, and anonymity were explained in detail to the students, and after their consent signatures were secured for the participation in the study, a survey was conducted. Furthermore, it was explained during the survey that if one does not want to, it may be interrupted at any point in time, and there is and will be no disadvantage whatsoever.

#### 2.2.3. Research tool

#### (1) General characteristics

General matters such as the subjects' age, gender, and grade year, satisfaction with club activities, clubs of affiliation, duration of club activities, and the number of participation in the club activities during an academic semester were surveyed.

#### (2) Career attitude maturity

The Career Attitude Maturity Inventory developed by Kihak Lee and Jongcheol Han (Choi, Y. H., 2017) was used to measure the career attitude maturity. The career attitude maturity inspection was consisted of a total of 47 questions with the five subfactors of determinism, purposefulness, certainty, readiness, and independence. It was measured on a 5-point Likert scale, and the total scores were calculated by adding up the responses of the corresponding questions in consideration of the questions which need to be inversely calculated. The reliability of the tool at the time of development was Cronbach's  $\alpha$ =.78, and it was Cronbach's  $\alpha$ =.95 in this study, respectively.

#### (3) Academic self-efficacy

As for the academic self-efficacy scale, the tool of Ko (Lee, J. A., 2012) tool was used. Academic self-efficacy is a judgment concerning the learner's ability to

organize and execute the actions required for the academic task performance, and in this study, the academic self-efficacy tool of Ko (Lee, J. A., 2012) was consisted of a total of 28 questions, of which 10 questions were focused on the preference for the difficulty of tasks, 10 questions on the self-regulation efficacy, and 8 questions on the self-confidence, respectively. It was based on a 6-point Likert scale, and the higher the score, the higher academic self-efficacy. At the time of development, the reliability of the tool was Cronbach's  $\alpha$ =.77~.85, and in this study, the difficulty of tasks was Cronbach's  $\alpha$ =.67, self-regulation efficacy was Cronbach's  $\alpha$ =.88, and the self-confidence was Cronbach's  $\alpha$ =.85, respectively.

#### 2.4. Data collection

To analyze the data of this study, the SPSS/WIN 21.0 program was used. The characteristics of the subjects were analyzed as frequency and percentage, the level of their career attitude maturity, and the academic self-efficacy with the mean and standard deviation. The testing of the differences in the level of career attitude maturity according to the general characteristics of the subjects was analyzed by the t-test, ANOVA, and Scheffé ex post test, respectively. The correlations between the study variables were analyzed by using the Pearson's correlation coefficients, and the variables influencing the career attitude maturity were analyzed by using the stepwise multiple regression analysis.

#### 3. Results

#### 3.1 General characteristics

Among the general characteristics of the nursing students carrying out the club activities, who are the subjects of this study, the average age was 22.13±5.42 years, respectively. As for the gender, there were 29 men students (14.4%) and 173 women students (85.6%), while 2 people were freshmen (1.0%), 5 people were sophomores (2.5%), 101 people were juniors (50%), and 94 people were seniors (46.5%). As for the students' satisfaction with club activities, it turned out that 126 people were "satisfied" (62.4%), 46 people were "very satisfied" (22.7%), 22 people were "not satisfied" (10.9%), and 8 people were "not satisfied at all" (4.0%). It was verified that volunteer club has the most with 130 people (64.3%), followed by dance, music, theater, cartoon, and film clubs with 58 people (28.7%), respectively. As for the period of club activities, less than 3 months had the most with 55 people (27.2%), 1 year or longer and less than 2 years had 39 people (19.3%), 3 months or longer and less than 6 months had 35 people (17.3%), and 6 months or longer and less than 1 year had 34 people (16.9%), respectively. As for the number of club activities during an academic semester, it was verified that 106 people (52.5%) participated twice or more and less than 4 times, and 66 people (32.7%) participated 4 or more times and less than 8 times, which were very high, and 2 people (1.0%) participated 16 or more times, which was low (Table 1).

Table 1. General Characteristics of the Subjects (N=22).

	ble 1. General Characteristics of Variables	N	%	M±SD (Max~Min)
	Age			22.13±5.42 (20~49)
	Male	29	14.4	
Gender	Female	173	85.6	
	Freshman	2	1.0	
	Sophomore	5	2.5	
Grade	Junior	101	50	
	Senior	94	46.5	
	Not satisfied at all	8	4.0	
Satisfaction of	Not satisfied	22	10.9	
club activities	Satisfied	126	62.4	
	Very satisfied	46	22.7	
	Dance, music, theater, cartoon, and movie clubs	58	28.7	
Clubs of	English and literature clubs	10	5.0	
affiliation	Volunteer clubs	130	64.3	
	Others	4	2.0	
	Less than 3 months	55	27.2	
	3 months or longer and less than 6 months	35	17.3	
Period of club activities	6 months or longer and less than 1 year	34	16.9	
activities	1 year or longer and less than 2 years	39	19.3	
	2 years or longer	39	19.3	
Number of	Once or more and less than twice	14	6.9	
participations in club activities for	Twice or more and less than four times	106	52.5	

an academic semester	Four times or more and less than eight times	66	32.7	
	Eight times or more and less than sixteen times	14	6.9	
	Sixteen times or more	2	1.0	

## 3.2. The level of the subjects' career attitude maturity and academic self-efficacy

As for the academic self-efficacy, difficulty of tasks, self-regulation efficacy, and self-confidence were surveyed. The subjects' difficulty of tasks was  $32.66\pm5.13$  points out of 60 points, respectively. The self-regulation efficacy was verified to be  $40.77\pm7.90$  points out of 60 points, self-confidence was verified to be  $30.00\pm7.69$  points out of 32 points, and the career attitude maturity was verified to be  $150.92\pm24.22$  points out of a total of 205 points, respectively (Table 2).

Table 2: Career attitude maturity and the academic self-efficacy (N=202)

Va	ariables	Mean	SD	Min~Max
Career att	itude maturity	150.92	24.22	0~203
	Difficulty of tasks	32.66	5.13	19~46
Academic self- efficacy	Self-regulation efficacy	40.77	7.90	17~60
cincacy	Self-confidence	30.00	7.69	8~48

# 3.3. Career attitude maturity, difficulty of tasks, self-regulation efficacy, and self-confidence according to the general characteristics of the subjects

Table 3 illustrates the results of the career attitude maturity, difficulty of tasks, self-regulation efficacy, and the self-confidence according to the subjects' general characteristics. The variables according to the gender and grade, satisfaction with club activities, clubs of affiliation, period of club activities, and the number of participation in the club activities during an academic semester were not statistically significant, yet there was a significant difference in the mean of self-regulation efficacy according to the number of participation in the club activities for an academic semester (F=4.06, p=.003).

Table 3. According to the General Characteristics of Participants (N=202) (\*Sheffé test)

Variables			Career attitude maturity		Self-regulation efficacy			Self-confidence			Difficulty of tasks		
		M±SD	t/F	p	M±SD	t/F	p	M±SD	t/F	p	M±SD	t/F	p
Gender	Male	152.52±20.8 9	0.0 1	.95 5	37.86±8.12	0.12	.73 2	35.66±9.4 4	0.4 4	.50 6	32.69±6. 21	2.23	.13 6

		150.65±24.7	1					35.18±8.7			32.66±4.		
	Female	8			41.26±7.78			7			94		
	Freshma	160.00±8.48			47.00±0.00			32.50±3.5			34.50±0.7 0		
	n Sophomo re	143.60±15.5 0	2.1	.09	37.60±9.78	0.60	.61	3 37.40±10. 73	1.0	.37	34.20±5.0		.09
Grade	Junior	147.50±28.6 0	1	0	39.46±7.95		5	36.07±8.3 4	4	2	34.13±4.0 8	1.37	8
	Senior	154.79±18.5 1			42.22±7.58			34.31±9.3 3			34.49±4.5 8		
	Not satisfied at all	157.25±16.4			41.88±10.64			32.50±9.9 1			34.50±2. 26		
Satisfactio n of club	Not satisfied	154.41±20.7 9	0.5		43.18±8.57	0.75	.41	32.77±9.0 5	0.2	.87	32.55±4. 98	2.12	.08
activities	Satisfie d	149.27±26.1 8	2	0	41.31±7.57		6	36.33±8.5 5	3	5	32.60±4. 86		8
	satisfied	152.67±21.2 0			37.96±7.49			33.96±9.1 4			32.59±6. 23		
	Dance, music, theater, cartoon, and movie clubs	150.07±26. 21			40.80±7.73	0.99		35.54±8.4 1			32.66±5. 47		
Clubs of affiliation	English and literatur e clubs	150.26±19. 96	4.6 2	9	40.34±7.79		.39	35.00±9.6 6	0.6 3	7	32.57±4. 69	.1.5	.21
		162.40±20. 83			43.40±11.2 5			34.20±9.4 3			34.30±3. 16		
	Others	159.50±18. 26			39.50±7.41			32.00±11.			30.00±3. 26		
	Less than 3 months	148.58±27. 17			39.73±8.35			35.56±8.5 0			34.09±5. 20		
	3-5 months	149.69±28. 66			41.43±8.51			35.37±8.2 6			32.83±4. 14		
Period of club	6-11 months	147.94±23. 77	0.9	.41 2	40.41±6.52	1.74	.14	34.03±9.2 9	0.6	.63 7	34.65±4. 01	2.1	
activities	12-23 months	152.54±21. 52		2	39.72±8.75		2	35.13±9.9 7	7	,	34.49±3. 85	O	1
	24 months or longer	156.31±17. 76			43.03±6.67			35.87±8.5 9			35.44±3. 44		
Number of participatio	Once	158.64±20. 04			41.93±8.30	4.06* (a>b,c,		38.71±7.6 6			34.07±7.		
ns in club activities	2-3 times	152.34±21. 14	1.0 8	.36 3	41.88±7.15	d,e) (b>c,d,	l	35.60±8.6 7	0.4 9	.74 6	58	1.4 5	.21 7
for an academic	4-7 times	151.14±26. 55			39.74±7.98	e) (c>d,e)		34.32±8.8 4			31.33±4. 80		

semester	8-15	137.43±17.	36.57±10.7		31.79±9.9	33.79±5.	
	times	93	2		3	72	
	16 times	109.00±93.	37.50±13.4		47.00±4.2	24.00±5.	
	or more	33	3		4	65	

## 3.4. The correlation between the career attitude maturity and academic self-efficacy of the subjects

There was a statistically significant, positive correlation between the career attitude maturity and the academic self-efficacy of the nursing students participating in the club activities (r=.26, p<.001). The specific items of academic self-efficacy such as the difficulty of tasks, self-regulation efficacy, and the self-confidence were also statistically significant for the career attitude maturity. As for the detailed items, the difficulty of tasks other than the career attitude maturity had a positive correlation (r=.26, p<.001), self-regulation efficacy other than the career attitude maturity had a positive correlation (r=.51, p<.001), and the career attitude maturity and self-confidence had a negative correlation (r=-.23, p<.001), respectively (Table 4).

Table 4: Relationship between the career attitude maturity and the career attitude maturity (N=202)

		(11=20	_,		
Variables	Career attitude maturity r(p)	Academic self- efficacy r(p)	Difficulty of tasks r(p)	Self-regulation efficacy r(p)	Self- confidence r(p)
Career attitude maturity	1				
Academic self- efficacy	.26 (<.001)	1			
Difficulty of tasks	.12 (<.042)	.26 (<.001)	1		
Self-regulation efficacy	.51 (<.001)	.66 (<.001)	.17 (<.007)	1	
Self-confidence	23 (<.001)	.40 (<.001)	30 (<.001)	19 (<.003)	1

## 3.5. The Factors by which the subjecs' career attitude maturity influences the academic self-efficacy

As a result of the analysis, the correlation coefficient of the independent variable turned out to be less than 0.8, and hence, all factors were used for the analysis. The factors influencing the career attitude maturity of the nursing students participating in the club activities on their academic self-efficacy are as follows (Table 5). As for the sub-factors of the academic self-efficacy, the stepwise multiple regression analysis was performed with the difficulty of tasks, self-regulation efficacy, and the self-confidence as the dependent variables. The subjects' career attitude maturity demonstrated a statistically significant effect on the academic self-efficacy. As a result of the multiple regression analysis performed, the regression model fit value F turned out to be statistically significant at 25.45 (<.001), and the Durbin-Watson test result was 2.02, which demonstrated no autocorrelation and no issue in explaining the dependent variable. The tolerance was 0.89-0.95, and was not 0.1 or less, and the variance inflation factors (VIFs) were lower than 10, and hence, it was verified that there was no issue of multicollinearity. The explanatory power of the model was 28%, respectively. Career attitude maturity has had the greatest positive effect on the selfregulation efficacy ( $\beta$ =1.48), and the difficulty of tasks ( $\beta$ =-0.02) and the selfconfidence (-0.39) have had a negative effect (Table 5).

Table 5: Factors influencing the academic self-efficacy of nursing students

Independent variables	Dependent Variable	β	t	p	Tolerance	VIF	R2	F(p)	Durbin- Watson
	Difficulty of tasks	0.02	- 0.06	.953	0.90	1.11			
Career attitude maturity	Self- regulation efficacy	1.48	7.77	<.001	0.95	1.06	.28	25.45 (<.001)	2.02
	Self- confidence	- 0.39	2.23	.027	0.89	1.12			

#### 4. Discussion

The purpose of this study was to investigate the level between the nursing students' career attitude maturity and academic self-efficacy, and verify the factors which influence the career attitude maturity of the nursing students participating in the club activities. Among the survey subjects, 64% of the nursing students participate in the volunteer clubs, which is slightly lower than the result of the study (Bae, K. E. et al., 2015) which claimed that 71.8% of the students have had volunteer experiences, yet

the fact that the study was conducted at the time of the COVID-19 should also be considered. Furthermore, it turned out that 85% or more of the subject students turned out to be satisfied with the club activities. Since the satisfaction with club activities is an important factor in making adjustment to college life (Bandura, A., 1977), it would be meaningful in that the nursing students' adjustment to the academic department provides for the preparation for achieving growth towards the nursing profession. The results of this study may be interpreted by dividing them into 2 main aspects.

First, it is the difference between the career attitude maturity and the academic self-efficacy following the general characteristics of the subjects. There was no significant difference in the career attitude maturity according to the general characteristics of the subjects of this study. In the previous studies, gender, grade year, and academic performance may be seen as the variables influencing the career attitude maturity, yet no consistent results among the variables are visible. Among the academic self-efficacies following the general characteristics, the self-regulation efficacy has had a significant difference according to the number of club activities for an academic semester, and there was a significant difference in the case of 1 time relative to the other times. However, considering the fact that the participation in the club activities was not carried out arbitrarily due to the COVID-19, it would mean that the students with a high self-efficacy have maintained their activities even while the number of club participations decreased relative to the difference in the number of times. In a previous study (Park, P. N., 2017), there was a significant difference when the students were freshmen among the general factors, where the grades from last semester were above average, where they applied for the academic departments in line with their aptitude and interest rather than their occupational value, and where their families were better off, and hence, there was a difference from the results of this study. Since this study was conducted under special circumstances, it is necessary to compare additional differences in the academic self-efficacy when face-to-face club activities are conducted arbitrarily.

Second, it is the verification of the factors which the career attitude maturity of the nursing subjects participating in the club activities has on the academic self-efficacy. The relationship between the academic career attitude maturity and the academic self-efficacy was statistically correlated, and the career attitude maturity was also statistically significant with the difficulty of tasks, self-regulation efficacy, and self-confidence, which are the sub-items of the academic self-efficacy. This is a result similar to that of a previous study (Kang, H. J., 2015) which claimed that the club participation has a positive effect on the career decision making self-efficacy. Furthermore, most of the previous studies demonstrated consistent results by which the significance of the relationship between the self-efficacy and career attitude maturity was acknowledged (Ko, B. S., et al., 2011), and the results of this study also confirm it as such. However, as a result of the multiple regression analysis performed,

the career attitude maturity had a positive relationship with the academic self-regulation efficacy, yet had a negative relationship with the difficulty of tasks and self-confidence. In a previous study (Ham, S. M., 2020), the difficulty of tasks was related to the self-efficacy, and if self-efficacy is enhanced, it would have the driving force to learn the new knowledge and skills under new circumstances, and hence, persistence will be acquired to carry out the tasks regardless of the high difficulty of tasks.

Furthermore, such self-efficacy has a significant positive relationship with the career attitude maturity (Ham, S. M., 2020), and hence, in order to enhance the students' career attitude maturity, various opportunities for them to adapt to a new environment ought to be provided, so that they can experience the tasks of various difficulties. This means that the students who have successfully performed challenging tasks by making a lot of effort can improve their career attitude maturity without being influenced by the difficulty of tasks.

In a phenomenological study which analyzed the meaning of the nursing students' experience of participating in the volunteer clubs (Ko, B. S., 2011), 7 components were derived in regards to the experience of the participation, of which a component called "running against the limitations" exists. This is reflective of the fact that the nursing students become disappointed and experience their declining self-esteem after they fail to address the health issues they experience on their own in the course of encountering the volunteer subjects, which might influence the self-confidence of the nursing students participating in the volunteer activities. By making inference, it may be considered that the nursing students experiencing the volunteer activities would experience their declining self-confidence, and in the results of this study, it may also be considered that the self-confidence variable of the academic self-efficacy was influenced. Consequently, while the direction of the variables is not clear, it may be said that the connection between the variables has been confirmed to some extent.

As for the career attitude maturity of the nursing students, it turned out 27.8% of the difficulty of tasks and self-efficacy, which are sub-factors of the academic self-efficacy, and of the career attitude maturity for self-confidence can be explained, and in particular, it has had the largest influence on the self-efficacy. Nursing students have a lower career attitude maturity relative to the students of other academic departments, which is because health related students have their major programs considered almost identical to ther occupations (Park, P. N., 2017), and hence, they lack in-depth considerations and evaluations of the selection of their career path. Due to which, the students who have not adequately considered their occupations and competencies fail to adapt to the clinical field as nurses, and repeatedly resign and change their jobs.

Therefore, to successfully grow into nurse after graduation, it is necessary to help the students ascertain the effect of career attitude maturity on the academic selfefficacy in detail, and also help strengthen their career attitude maturity by providing career guidance or study guidance by using them in college life. It may be said that various club activities are important for improving the major competency. Nursing students have a lot of difficulties faced in pursuing their academic achievement across their major subjects. In this process, various club activities, particularly the volunteer club activities, will help enable their improvement of self-efficacy, which has been difficult due to the curricular activities, and through such volunteer activities, it would be possible to improve their self-efficacy, while being given the opportunities to fully explore their aptitude and values as nurses, which is considered to have the influence on the improvement of the academic self-efficacy, which is important for making adaptation to college.

The men can achieve the ideal self-actualization when they perform work matching their abilities, aptitudes, and values. For such self-realization, college life will be the optimal time to accurately understand and prepare for their abilities and aptitudes. However, relative to other academic departments, the nursing students, who enter college after deciding their career path with clarity to some extent, experience difficulties in their career attitude maturity as they do not think adequately about their aptitude due to heavy work load. This is because professors do not fully consider the students' other career paths in most cases.

However, based on the results of this study, it is necessary that students be encouraged to participate in the club activities while attending college, and in particular, through their regular participation in the volunteer activities, they need to be afforded conditions with which to fully cultivate their academic self-efficacy, through which, they can fully think about their aptitude and career as nurses, while colleges ought to provide the students with guidance and learning instructions, and ultimately, the students must be able to maximize their abilities as nurses in practice and be inspired towards their professional growth in nursing. It is also an important way to naturally return the studies of nursing to the local community via volunteer work as the future nurses.

This study was conducted for the data collected in a self-entry format via a cross-sectional survey design, and the results of this study cannot be generalized since most of the subjects were juniors and seniors, who are only some of the college students from the nursing department. Furthermore, there are limitations to explaining the relationship of additional variables other than the corresponding variables by using only the variables forecasted as the main variables through the previous studies, and hence, it is impossible to ascertain the causal relationship between the variables.

However, in the case of the nursing students in college participating in the club activities, particularly the volunteer activities, it is significantly meaningful in that the relationship between the academic self-efficacy and the career attitude maturity can be verified, and could also be applied to the college preparation process for fostering nurses.

#### 5. Conclusion

In this study, the academic self-efficacy of the nursing students has had a significant effect on the career attitude maturity, and the most influential factor was the self-regulation efficacy. The difficulty of tasks and self-confidence have had a negative effect. Based on the results of this study, recommendations can be made as follows. First, additional studies can be conducted to verify the causes of the negative effects on the self-efficacy as a result of this study by conducting additional surveys on the difficulty of tasks and self-confidence of the subjects of this study. Second, an effect evaluation study can be conducted to specifically verify the relationship between the club activities and the self-efficacy. Third, a study can be conducted to verify the effect of the club activities and the career attitude maturity on the growth of the nursing students as the actual nurses by identifying and examining the effects of the job adaptation after they grow into the new nurses. Fourth, a study can be conducted to explore the social sources of support which may help improve the nurses' career maturity via the college centric club activities which influence the nursing students' self-efficacy.

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