

Relationships between Self-Efficacy, Stress, Depression and Adjustment of College Students

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Abstract

This study examined the relationship between student adjustment to college and academic self-efficacy, perceived college stress, depression among college students. Data were collected 1,134 college students in a city of Korea. All scales used in this study statistically were reliable. The summarized results were as follows. High self-efficacy was related to better college life adjustment; adjustment had a strong positive correlation with academic self-efficacy ($r = .586, p = .000$). Perceived college stress ($r = -.324, p = .000$) and depression ($r = -.267, p = .000$) had negative correlations with college life adjustment. The largest positive impact factor on college life adjustment was self-efficacy ($\beta = 0.531, p = .000$), with the R squared of the model being 36.2 ($F = 215.351, p = .000$). Through this study, self-efficacy was found as having the most positive effect on college life adjustment in similar with previous studies. Moreover, this effect was regardless of the school grade. Students with high levels of academic self-efficacy had less stress and were better adjusted to college life. For further research, studies to verify the mediating effects of academic self-efficacy and to develop programs that would promote self-efficacy are suggested in order to improve college life adjustment.

Keywords: Adjustment, College life, College student, Self-efficacy, Stress, depression

1. Introduction

A topic of long-standing interest for university or college administrators and faculty is how to help students succeed academically. At the beginning of a college is a transitional point, by going beyond the transition into adulthood. This period is a time to focus on several tasks necessary to prepare for adult life and particularly ego identity established. College students have a mature physical body, but their economic, social or psychological development is not quite enough¹. Even all the new things that college students had met at college are faced with great stress: their fellows, teachers, staff and even environment that surround them. This fact is either met as a challenge that they need to accept and overcome, or as a problem that is a cause of great stress². The complex stress and conflict, as well as the problem-solving process that they experience take up a large part of the adjustment to college life. This period in their lives also become a preparation for a

successful life post-graduation³⁻⁵. The college experience is unique to every student; some students are successful, while others struggle. Students seek higher education as they expect that university education influence individual development in values, life style, and career aspiration⁶. Effective adjustment to their college life is an important preparation for successful entry to society to address the complex stress and conflict experience in college life with a positive and reasonable. Considering the following facts; the college student is a potential stressor itself, and stress has a negative effect on the adjustment, the adjustment to college life with different requirements is an important topic to be addressed as a critical development phase.

Certain factors may allow some students to succeed academically, such as academic self-efficacy and stress coping skills⁷. Self-efficacy beliefs are an important aspect of human motivation and behavior as well as influence the actions that can affect one's life. Bandura⁸ explains

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that it “refers to beliefs in one’s capabilities to organize and execute the courses of action required to manage prospective situations”. “Self-efficacy refers to people’s judgements about their capability to perform particular tasks. Task-related self-efficacy increases the effort and persistence towards challenging tasks; therefore, increasing the likelihood that they will be completed”⁹. The basic principle behind Self-Efficacy Theory is that individuals are more likely to engage in activities for which they have high self-efficacy and less likely to engage in those they do not¹⁰. In the previous research, the importance of academic self-efficacy was emphasized both in moderating the effect of stressors on perceived stress for college students and also in predicting academic success in college¹¹.

As such, this study was conducted to identify the factors that affect college life adjustment. So this study was carried out in order to verify the relationship between student adjustment to college and academic self-efficacy, perceived college stress, depression among college students.

2. Methodology

2.1 Study Subjects

After explaining the purpose of the study, 1,330 college students who gave us their consent were surveyed using a structured questionnaire. Of these, 189 copies that were difficult to use for analysis due to the insufficient data provided were excluded for analysis purposes. During statistical analysis, two cases where the absolute value of the regression standardized residual was 7 or higher was excluded through a case-wise diagnostics, making the total number of study subjects 1,134.

2.2 Measurements

To measure academic self-efficacy, the 24 question survey of Lee¹² was used and to measure perceived stress of college life, the 50 question survey of Chon¹³ was used. To measure depression, the tools that were developed by Ronan et al (1994) and translated by Lee & Kim¹⁴, of which 10 questions with a high level of factor weight were selected for the 4-point Likert-type scales. To measure college life adjustment, the 30 question scale of Kim¹⁵ was used.

Cronbach alpha coefficients indicating the reliability of the research tools were respectively .86 (academic self-efficacy), .95 (perceived stress of college life), .92 (depression), and .85 (college life adjustment).

2.3 Method of Data analysis

The correlation between variables was verified using the independent t-test, stepwise multiple linear regression and Pearson’s correlation coefficients of the SPSS/PASW 21.0 program.

3. Results

Almost three-quarters (71.0%) of sample members are female. 561 students of all 1,134 subjects were newly admitted students in their first year. To the question asking about their living arrangements, 439 students (38.7%) answered that they were living with their family in their home with owner-occupied. 400 respondents (35.3%) were lease residence status, and 20 respondents (1.8%) were living in a relative’s home and 223 students (19.7%) were living in dormitory room. And 48 students (4.2%) were renting a room at boarding house. To the question asking about their religion, 54.7% (620 people) said they had no religion, 24.4% (277 people) said they were Christian, 6.9% (78 people) said they were Catholic and 13.1% (148 people) said they were Buddhist. Of the respondents, 178 of them or 15.7% were smokers, 18.1% (205 people) did not drink and 59.6% (676 people) drank once or 2-3 times a month. Of the total respondents, 20.5% (232 people) said they drank 1-2 times or 3-4 times a week, and 1.9% (21 people) said they drank daily Table 1.

The result of analyzing the four variables of college life adjustment, self-efficacy, perceived stress, and depression for their correlation using Pearson correlations was as follows.

There was a strong positive correlation ($r = .586$, $p = .000$) between college life adjustment (3.18 ± 0.44) and self-efficacy (3.11 ± 0.45). Meanwhile, there was a strong negative correlation ($r = -.324$, $p = .000$) with stress (1.95 ± 0.62), and a weak negative correlation ($r = -.267$, $p = .000$) with depression (1.85 ± 0.62). All of these results were statistically significant Table 2.

Among the major variables, self-efficacy ($\beta = 0.531$, $p = .000$), $\text{ssantu123}\beta = -0.033$, $p = .000$) and depression ($\beta = -0.136$, $p = .218$), had an effect on the college adjustment with an explanatory power of 36.2 ($F = 215.351$, $p = .000$) [Table 3]. The results of college life adjustment factor in effect a regression divided by school grade level were as follows. In the second grade and third grade, the β values of self-efficacy for the college life adjustment were higher compared to the first grade. From this result,

Table 1. General characteristics of participants (N = 1,134)

Characteristics	Categories	n	%
Gender	Male	329	29.0
	Female	805	71.0
School degree	1	561	49.5
	2	171	15.1
	3	402	35.4
Residence	Owner-occupied	439	38.7
	Lease	400	35.3
	Monthly rent	48	4.2
	Relatives	20	1.8
	Dormitory	223	19.7
	Other	4	.4
Religion	None	620	54.7
	Christianity	277	24.4
	Catholic	78	6.9
	Buddhism	148	13.1
Smoking Status	No	906	79.9
	Yes	178	15.7
	No, before	50	4.4
	Alcohol Drinking Status	No	205
Alcohol Drinking Status	1/month	277	24.4
	2~3/month	399	35.2
	1~2/week	190	16.8
	3~4/week	42	3.7
	Almost daily	21	1.9

Table 2. Correlations among adjustment, self-efficacy, stress, and depression (N = 1,134)

Variables	Mean	SD	Pearson's correlation coefficient		
			Adjustment	Self-efficacy	Stress
Adjustment	3.18	.44			
Self-efficacy	3.11	.45	.586*		
Stress	1.95	.49	-.324*	-.328*	
Depression	1.85	.62	-.267*	-.331*	-.432*

*: p-value <.01

academic self-efficacy was identified as having the most positive effect on college life adjustment throughout the entire school degree.

After calculating the average of 1,134 college students who self-efficacy scores were divided into two groups (less than the average score and more than the average score of self-efficacy) for comparison of the another variables.

Table 3. Influencing factors of college life adjustment (N = 1,134)

School degree	Variables	B	SE	B	Adjusted R ²	F (p)
All	Constant	1.826	.108		.362	215.351 (.000)
	Self-efficacy	.527	.026	.531		
	Stress	-.123	.024	-.033		
	Depression	-.024	.019	-.136		
1	Constant	2.105	.157		.318	87.975 (.000)
	Self-efficacy	.461	.038	.457		
	Stress	-.145	.034	-.167		
	Depression	-.056	.029	-.077		
2	Constant	1.793	.249		.411	40.509 (.000)
	Self-efficacy	.540	.058	.608		
	Stress	-.133	.078	-.126		
	Depression	.007	.058	.009		
3	Constant	1.405	.185		.398	89.224 (.000)
	Self-efficacy	.616	.044	.604		
	Stress	-.060	.041	-.066		
	Depression	-.004	.029	-.006		

Table 4. Comparison of depression, perceived stress and adjustment to college life between higher and lower groups of self-efficacy (N = 1,134)

Variables	Higher group of Self-efficacy (n = 502)		Lower group of Self-efficacy (n = 632)		t	p-value
	Mean	SD	Mean	SD		
Self-efficacy	3.49	0.33	2.81	0.26	37.757	.000
Adjustment	3.41	0.44	3.00	0.36	16.863	.000
Stress	1.81	0.47	2.07	0.48	-9.047	.000
Depression	1.68	0.55	1.99	0.65	-8.730	.000

Between higher and lower groups of self-efficacy, the average scores of variables were compared by t-test. A The results of the t-test among the variables showed that depression, perceived stress and adjustment to college life have group differences in academic self-efficacy. The perceived stress score of the higher group of self-efficacy was significantly lower than that of the lower group of self-efficacy Table 4.

4. Conclusions

The main research questions in this study concern the relationship between academic self-efficacy, perceived college stress, depression, and college life adjustment. So this study examined the relation of perceived stress

and college life adjustment among college students, and compared depression, perceived stress and adjustment to college life between higher and lower groups of self-efficacy that these relations would be mediated by academic self-efficacy respectively. College life adjustment had a strong positive correlation with self-efficacy. And the factor that had the largest positive impact on college life adjustment was self-efficacy. These findings are similar to the study of Lyrakos²; self-efficacy is a strong factor as the positives ways of coping in universities. Also in the Khan's report⁷, students with high academic self-efficacy have shown to perform better academically. Through this study, self-efficacy was found as having the most positive effect on college life adjustment in similar with previous studies^{1-2,4,7,11}. So it was proved that a contributing factor to academic adjustment is related to the individual's level of self-efficacy.

Through this study, academic self-efficacy was identified as having the most positive effect on college life adjustment regardless of the school grade. Students with high levels of academic self-efficacy had less stress and were better adjusted to college life.

For further research, studies to verify the mediating effects of academic self-efficacy and to develop programs that would promote self-efficacy are suggested in order to improve college life adjustment.

5. References

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