

**Global Journal of Arts Humanity and Social Sciences**  
ISSN: 2583-2034  
Abbreviated key title: Glob.J.Arts.Humanit.Soc.Sci  
Frequency: Monthly  
Published By GSAR Publishers  
Journal Homepage Link: <https://gsarpublishers.com/journal-gjahss-home/>

Volume - 4 | Issue - 1 | Jan 2024 | Total pages 31-34 | DOI: 10.5281/zenodo.10477662

## How Does Academic Self-efficacy Works on Learning Adaptation among College Students

BY

Hou Yongmei<sup>1\*</sup>, Mei Zitao

Department of Psychology, School of Humanities and Management, Guangdong Medical University, Dongguan, China



### Abstract

College students, and analyze the impact of academic self-efficacy on learning adaptability. **Method:** Three hundred and thirteen undergraduates were selected randomly from Guangdong Province, China, who were surveyed with Academic Self-Efficacy Scale (ASES) and Learning Adaptation Scale for College Students (LAS).

**Results:** First, The total scores of ASES and LAS in this group were (70.18±9.85) and (85.01±14.46), respectively. Second, the result of multiple linear stepwise regression analysis shows that academic ability self-efficacy (AABSE) positively predicts the total score of LAS and its five dimensions ( $\beta=0.123\sim0.525$ , all  $P<0.05$ ); academic conduct self-efficacy (ACOSE) positively predicts LM and LAB ( $\beta=0.178, 0.191$ , both  $P<0.001$ ), and negatively predicts LE ( $\beta=-0.119$ ,  $P<0.001$ ). **Conclusion:** The academic self-efficacy and learning adaptability of college students are at a moderate level, and there is still a lot of room for improvement. Academic self-efficacy may be one of the main influencing factors of college students' learning adaptability.

**Keywords:** College students, Academic self-efficacy, Learning adaptability, Influencing factor

### Article History

Received: 01- 01- 2024

Accepted: 08- 01- 2024

Published: 10- 01- 2024

Corresponding author

Hou Yongmei

### Introduction

Learning adaptability is the psychological tendency of learners to overcome difficulties and maintain harmony with the learning environment during the learning process, in order to achieve good learning effectiveness [1]. Learning adaptation not only means that learners passively adapt to teaching methods and learning environments, but also manifests as the ability of learners to actively adjust their learning motivation and behavior, improve their learning ability, coordinate their learning psychology and behavior with constantly changing learning conditions, and achieve good learning results. It is not only an important influencing factor for students' academic achievement and mental health but also an important guarantee condition for future adaptation to society [2].

Academic self-efficacy [3] refers to the expectation and judgment of one's ability to complete a certain learning task or engage in a specific learning activity, and can also be said to be an individual's belief in academic ability. Academic self-efficacy determines an individual's response to the gap between goals and self-expression. Those with high self-efficacy will make further efforts to narrow

the gap, while those with low self-efficacy will give up their efforts.

Generally speaking, academic self-efficacy affects learning behavior in several ways. First, academic self-efficacy affects an individual's choice of learning tasks. In the case of free choice, students tend to choose tasks that they feel confident in, while avoiding tasks that they feel lack confidence in. Second, self-efficacy affects how much effort students put into a certain learning task and how long they can persist when faced with difficulties. The stronger the sense of academic self-efficacy, the harder one studies, and the longer he persists in facing difficulties. Final, academic self-efficacy affects the tension and anxiety that students experience when dealing with learning tasks. High self-efficacy individuals remain calm, composed, and pay more attention to learning issues, while low self-efficacy individuals feel nervous and uneasy, paying more attention to their emotional reactions rather than learning task. It can be seen that self-efficacy should affect learning adaptability. However, there is limited research on the specific impact of self-efficacy on learning adaptability.



Based on the above analysis, this study aims to understand the current status of academic self-efficacy and learning adaptability among college students, analyze the impact of academic self-efficacy on learning adaptability, and provide reference opinions for promoting the learning effectiveness of college students.

## 1. Objects and Methods

### 1.1 Objects

Three hundred and fifty college students were randomly selected from Guangdong Province, China, and a total of 313 valid questionnaires were obtained, with an effective rate of 89.43%. Among them, there are 161 males and 152 females; 89 freshmen, 80 sophomores, 75 juniors, and 69 seniors.

### 1.2 Tools

#### 1.2.1 Learning Adaptability Questionnaire for College Students, LAS

Compiled by Feng Tingyong et al. (2006) [4]. LAS has 29 items, divided into 5 factors: learning motivation (LM), teaching mode (TM), learning ability (LAB), learning attitude (LAT), and environmental factors (LE). Likert 5-point scoring method is used to score from 1 to 5 points corresponding to “completely disagree” to “completely agree”. The higher the score, the stronger the learning adaptability. In this study, the Cronbach's  $\alpha$  coefficient of the full scale is 0.837, and the Cronbach's  $\alpha$  coefficients of 5 factors are 0.775, 0.721, 0.764, 0.743, 0.731.

#### 1.2.2 Academic Self-efficacy Questionnaire for College Students, ASES

Compiled by Liang Yusong (2000) [3], with 22 entries. It is divided into two dimensions: academic ability self-efficacy (AABSE) and academic conduct self-efficacy (ACOSE), with 11 questions for each dimension. The Likert 5-point scoring method is used to score from 1 to 5 points corresponding to “completely disagree” to “completely agree”. The higher the score, the higher the academic self-efficacy. In this study, the Cronbach's  $\alpha$  coefficient of the full scale is 0.846, and Cronbach's  $\alpha$  coefficients of two dimensions are 0.802 and 0.782.

### 1.3 Data processing

SPSS 20.0 is used for statistical analysis. Descriptive statistics is used to calculate the average score and standard deviation of each scale; Pearson product-moment correlation is used to explore the correlation between variables; Linear regression analysis is used to analyze the influence of academic self-efficacy on learning adaptability.

## 2. Results

### 2.1 Overview of academic self-efficacy and learning adaptability among college students

According to Table 1, TM belongs to low score, while ASES total score, LAS total score, and the remaining six dimensions belong to medium score [3,4].

Table 1. Descriptive statistics of ASES and LAS (n=313)

Dimension	M	SD	Min	Max	Mof item	SD of item
AABSE	35.81	6.23	19	51	11	3.26 .57
ACOSE	34.37	4.08	22	47	1	3.12 .37
ASES	70.18	9.85	52	94	22	3.19 .87
LM	24.63	2.65	15	37	8	3.08 .29
TM	17.13	4.13	7	30	7	2.45 .59
LAB	20.82	3.68	11	34	6	3.57 .61
LAT	10.35	2.57	5	18	4	2.59 .62
LE	12.18	2.37	6	18	4	3.05 .55
LAS	85.01	14.46	52	129	9	2.96 .49

### 2.2 Impact of academic self-efficacy on learning adaptability among college students

#### 2.2.1 Correlation analysis between academic self-efficacy and learning adaptability among college students

According to Table 2, except for the insignificant correlation between TM and ACOSE, LAT and ACOSE, LE and ASES, LAS and ACOSE, there is a significant correlation between the total score and other dimensions of the two scales ( $r=123\sim 0.525$ , all  $P<0.05$ ).

Table 2. Correlation analysis between ASES and LAS (n=313)

Dimension	LM	TM	LAB	LAT	LE	LAS
AABSE	0.5	0.32	0.58	0.262	0.1	0.396*
ACOSE	25**	3**	2**	**	23*	*
ASES	0.1	-0.039	0.19	-0.042	-	0.067
	78**	0.22	1**		0.11	0.315*
	0.4	4**	0.53	0.177*	9*	*
	69**		7**	*		
					0.03	
					2	

#### 2.2.2 Multiple linear regression analysis of the impact of academic self-efficacy on learning adaptability among college students

Taking LAS, LM, TM, LAB, LAT, and LE scores as the dependent variable respectively, and AABSE and ACOSE scores as the independent variables, multiple linear stepwise regression analysis is conducted within a 95% confidence interval. The results are shown in Table 3.



According to Table 3, it can be seen that AABSE positively predicts the total score of LAS and its 5 dimensions ( $\beta=0.123\sim0.525$ , all  $P<0.05$ ); ACOSE positively predicts LM, LAB

( $\beta=0.178, 0.191$ , both  $P<0.001$ ), and negatively predicts LE ( $\beta=-0.119, P<0.001$ ).

**TABLE IV: MULTIPLE LINEAR STEPWISE REGRESSION ANALYSIS OF ASES FACTORS TO THE SCORES OF LAS**

Dependent Variable	Independent Variable	B	SE	$\beta$	t value	P value	R <sup>2</sup>	R <sub>adj</sub> <sup>2</sup>
LAS	AABSE	0.544	0.095	0.396	5.027	<0.001	0.439	0.433
LM	AABSE	0.735	0.142	0.525	6.591	<0.001	0.309	0.311
	ACOSE	0.307	0.069	0.178	3.899	<0.001		
TM	AABSE	0.492	0.089	0.323	2.023	0.043	0.560	0.657
LAB	AABSE	0.691	0.119	0.528	8.299	<0.001	.631	0.627
	ACOSE	0.307	0.059	0.191	13.077	<0.001		
LAT	AABSE	0.424	0.097	0.262	7.911	<0.001	0.187	0.182
LE	AABSE	0.367	0.092	0.123	4.958	<0.001	0.487	0.480
	ACOSE	-0.279	0.063	-0.119	-4.654	<0.001		

### 3. Discussion

The TM score of this group is low, while the total score of ASES, LAS, and the remaining six dimensions are moderate [3, 4], which is consistent with the results of previous literature [5-7]. This suggests that the academic self-efficacy and learning adaptability of college students are average, with great room for improvement, but their adaptability to teaching modes is poor.

This study finds that AABSE positively predicts the total score and five dimensions of LAS, while LCOSE positively predicts LM and LAB, negatively predicting LE, which is consistent with the research results of Wang Wei et al. [8], Dan Ying [9], and Li Jie et al. [10]. There is a direct relationship between the learning adaptability of college students and their academic self-efficacy. The strength of learning adaptability is not solely based on learning methods and strategies, but largely on self-awareness at the psychological level and cognition of learning tasks. The higher the academic self-efficacy, the better the learning adaptability, and the better the effectiveness of the ability in learning. Through the comprehensive effect of superior learning ability and learning adaptability, the goal of completing academic tasks is achieved. Specifically, the higher a student's academic self-efficacy, the more confident their academic confidence is, the higher their enthusiasm for learning, the stronger their motivation for learning, a more positive attitude towards learning, higher learning goals, and a more harmonious relationship with teachers and classmates. When encountering problems, they are able to seek timely methods and help, making them more likely to solve problems. Being able to develop and execute reasonable learning plans makes learning methods more flexible and appropriate, and their learning adaptability also increases. On the contrary, the lower the academic self-efficacy of students, the weaker their interest, motivation, and confidence. They set lower learning goals to avoid possible unpleasantness caused by failure. Learning is a very painful thing

for them, and completing learning tasks is a very difficult or even impossible thing. Faced with learning tasks, they fear and retreat, rather than trying to solve or consult teachers and classmates, This results in lower learning adaptability [11].

### 4. Conclusion

This study confirms the positive predictive effect of academic self-efficacy on the learning adaptability among college students, once again proving the role of non intellectual factors in learning activities. The conclusion of this study has positive reference significance for higher education workers to correctly understand the connotation and relationship between professional education and quality education, and to scientifically carry out educational and teaching activities for college students.

### References

1. Feng TY, Li H. Preliminary study on the learning adaptability of contemporary college students [J]. Exploring Psychology, 2002, 22(1): 44-48.
2. Hayat AA, Shateri K, Amini M, et al. Relationships between academic self-efficacy, learning-related emotions, and metacognitive learning strategies with academic performance in medical students: A structural equation model[J]. BMC Medical Education, 2020, 20(1): 76-87.
3. Liang YS. Study on achievement goals, attribution styles, and academic self-efficacy of college students [D]. Wuhan: Central China Normal University, 2000.
4. Feng TY, Su T, Hu XW, et al. Development of a Learning Adaptation Scale for College Students [J]. Journal of Psychology, 2006, 38(5): 762-769.
5. Zhang XH, Luo RZ, Zhang CM, et al. Relationship between problem-solving ability and self-directed learning readiness of nursing undergraduate students: The mediating effect of academic self-efficacy [J].



- Nursing Research, 2017, 31(33): 58-61.
6. Liu MC, Liu LM, Li H, et al. Correlation between academic self-efficacy of undergraduate nursing students and their adaptability to online course learning [J]. Health vocational education, 2022, 40(8): 24-26.
  7. Tang J. Impact of academic self-efficacy on learning adaptability among college students: The mediating role of learning motivation [J]. The Science Education Article Collections, 2018, (8A): 35-37.
  8. Wang W, Lei L, Wang XC. The impact of proactive personality on academic performance among college students: The mediating role of academic self-efficacy and learning adaptation [J]. Psychological Development and Education, 2016, (5): 579-586.
  9. Dan Y. A study on the relationship between learning ability, learning adaptability, and academic self-efficacy among college students [J]. Journal of Xinyu University, 2016, 21(4): 154-156.
  10. Li J, Song SG. Academic self-efficacy, academic emotions, and learning adaptability of college students [J]. China Journal of Health Psychology, 2013, 21 (9): 1429-1431.
  11. Zhang DJ. The characteristics of adaptive development of contemporary Chinese college students [J]. Journal of Southwest University (Social Sciences Edition), 2007, 33(4): 124-128.