

Self-efficacy's Influence on College Students' Academic Performance

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Abstract: Some college students begin their courses with low self-efficacy. Before beginning a course, they start considering “I cannot do well in this class” or “This class isn’t a good choice for me”. In previous papers, several researchers have provided their findings on the related topic. However, according to their experiments, different results were discovered and different explanations were given. Thus, this paper is a literature review and the purpose of it is to summarise the previous point of views and give possible explanations for the variety of results. In this article, self-efficacy’s impact on academic performance, as well as the inner process in which self-efficacy influences academic performance will be discussed. As a result of the finding, it is concluded that a high level of self-efficacy positively influences academic performance, and the inner correlation between self-efficacy and academic performance is explained. Moreover, some tips are given for students to improve their self-efficacy.

Keywords: self-efficacy, specific self-efficacy, academic performance, confidence, motivation

1. Introduction

1.1. Concept of self-efficacy

Self-efficacy was a concept first raised by Bandura in 1977. Self-efficacy is generally defined as people believing they can control their own functioning and the events that affect their lives. [1] In other words, it represents how people evaluate themselves toward a certain task or ability. According to Bandura, one’s expectation of self-efficacy results in the initiation of coping behavior, the effort being paid, and the time one persists when overcoming obstacles. [2] People with high levels of self-efficacy are more likely to believe they can complete one task and have higher confidence, and they are more likely to put more effort into a certain task or subject.

Further studies have been done on self-efficacy to refine this concept. Self-efficacy was divided into different aspects. For example, academic self-efficacy differs from sports self-efficacy, and it is hard to transfer self-efficacy for one area into self-efficacy for another area. [3] For this article, the main topic is to discuss self-efficacy’s effect on college students’ academic performance and how self-efficacy can affect their academic performance.

1.2. Importance and research gap

Academic performance is one of the most important things for college students. With the research on self-efficacy is done, the student may try to improve their self-efficacy to have higher academic performance. Also, letting the students learn how self-efficacy influences academic performance is beneficial to their actual practice when they need to improve their self-efficacy.

In the previous research, the studies generally concluded that higher self-efficacy is related to higher academic performance. However there exists a research gap on a more specific type under self-efficacy, also some of the experiments fail to exclude a few confounding variables. As a result, this article is going to give an overall review of previous articles about self-efficacy's influence on academic performance and draw a comprehensive conclusion.

2. Existing literature's point of view on the effect of low self-efficacy on academic performance

2.1. Generally, low self efficacy has a negative correlation with academic performance

Consistent with general beliefs, the existing paper points out that low self-efficacy negatively influences the academic performance of college students. Having low self-efficacy represents students having low self-confidence, which correlates with academic performance. In a study, the researchers compared the freshmen's GPA in high school, their GPA in college (University of California, Santa Cruz), and their self-efficacy score. They found that despite the influence of their actual ability, self-efficacy among college students still plays an important role in their academic performance. Those students with confidence in themselves perform better than others. [4] Low self efficacy causes students to subjectively consider themselves not capable of completing a task, which negatively impacts their ability to learn new things and their academic performance.

The negative impact of low self-efficacy was also proved by a study in Arabia. By comparing the college student's GPAs and their score on the Academic Self-Efficacy subscale, they concluded that there is a small but significant relationship between academic self-efficacy and academic performance. [5] In conclusion, in different areas and cultural backgrounds, self-efficacy plays an important role in students' academic performance. There exists a correlation between low self-efficacy and low academic performance.

2.2. According to other research, the result shows that only part of self-efficacy has an influence towards academic performance

However, it is improper to attribute academic performance completely to self-efficacy. Self-efficacy is a fairly wide concept, under general self-efficacy, it can be divided into self-efficacy for certain tasks. And some of the tasks do not influence their academic performance. For example, it is obvious that self-efficacy to play sports barely influences academic performance.

A student has high self-efficacy in a subject, they believe they can perform well on the test. They have a higher enthusiasm for this certain subject and a higher academic motivation for facing the challenge. [6] However, when the subject changes, people may not have the same level of self-efficacy. Simply, a student good at math may not be good at literature. As a result, there is a necessity to divide self-efficacy into different aspects to consider this question.

By dividing self-efficacy into general self-efficacy, academic self-efficacy, and specific self-efficacy, one study comes up with a surprising result that only specific self-efficacy is significant to academic performance. [7] According to their correlational study, the correlation coefficient between specific self-efficacy and term score is .32, but this coefficient between academic self-efficacy and term score is only .22. This can be explained by the term score being a micro assessment, which needs

context and task-specified measurement of self-efficacy. Only when the criteria performance is as global as the measured self-efficacy, global self-efficacy can be meaningful.

Under specific self-efficacy, another study simultaneously researches three types of self-efficacy, including self-efficacy staying motivated in situations where you may encounter difficulties; self-efficacy refers to coping with the intellectual demands of the course, and self-efficacy refers to getting at least a passing grade on the final assessment. Surprisingly, the result comes out that “self-efficacy to at least gain a pass was the only variable to significantly predict performance”. [8] It may be explained that gaining a pass is a much easier task and students will be more confident to complete it. After that, they tend to attribute this success to their ability.

As a general concept, differences in self-efficacy can explain some of the differences in academic performance. However, for specific scores of a subject, it is more proper to use specific self-efficacy to estimate the academic performance of a student.

2.3. Confounding variables contribute to the result's variation

Though having some correlation with academic performance, self-efficacy can only affect academic performance at a small level. The above research mentioned the correlation between self-efficacy and academic performance is significant but small. It is due to academic performance is affected by many factors such as natural intelligence, location, and financial situation. Those confounding variables may let researchers connect a stronger relationship between self-efficacy and academic performance than it be.

Research shows that although there exists a positive correlation between self-efficacy level and academic performance in language courses, a significant difference was shown between students in rural areas and students in urban areas. By researching on the self-efficacy level and academic performance of the students in both areas, they found urban students have higher level of self-efficacy and grades. [3] The difference in location causes different economic situations and educational resources. Compared to rural students, urban students are more likely to be involved in clinical sciences research, publish articles in journals, and develop hobbies after class. [9] Also, there is exclusive nature of educational mobilities, the inequalities will be caused by urban biased policies. [10]

This implies that although a correlation exists between self-efficacy and academic performance, it doesn't mean there is a causation. Higher self-efficacy levels and academic performance may both be caused by a third factor, which may not be considered by some other researchers.

In academic performance, some other factors are as essential as nurture factors. Research on Holland Theme states that GPA was not substantially associated with either type of self-efficacy. [11] They research the relationship between general self-efficacy and Holland Theme, as well as the relationship between Holland Theme self-efficacy and academic performance.

As a result, they found a small influence of the Holland Theme and self-efficacy towards academic performance, and there is a significant correlation between specific Holland themes and self-efficacy. They provide a possible explanation that the first-year students' GPAs are more likely to be influenced by other factors than self-efficacy level. After excluding the first-year students, they found an increase in their correlation coefficient between self-efficacy and GPA. Interestingly, this conclusion is only available to men, for women there is no significant difference. They explain that men are more likely to gain confidence and self-efficacy in their good performance in the first year due to their high scores on Conventional themes.

As one factor to influences overall academic performance, self-efficacy does play an important role in academic performance, but its effect shouldn't be over estimated. Besides self-efficacy, some natural or objective conditions may be more influential.

3. Different factors make self-efficacy influence academic performance: the inner reason

3.1. Cause of procrastination

Procrastination is becoming a common situation among students, almost everybody procrastinates to a certain extent. [12] Students with severe procrastination usually delay their work until the deadline. Many researchers have concluded that a higher level of procrastination lead to a lower level of academic performance. [13,14] The students will accumulate anxiety through the whole term and be more agitated before their final test, causing their lower academic performance.

According to the research, a low level of self-efficacy for self-regulation is the most predictive of procrastination. Also, 25% percent of the students were classified as negative procrastinators. They are more likely to have greater daily and task procrastination, lower expected and actual performance, and lower self-regulating efficacy. [15] Those students who procrastinate a lot, have low confidence in their tasks and avoid their work. In the long term, it becomes procrastination. These students know the disadvantages of procrastination and the strategy of studies, but they do not have enough confidence in the subject. For those students with procrastination, it is not enough to provide them just with academic knowledge. It is more important to provide them with easier tasks or stimulate their confidence by praising them to enhance their efficacy.

3.2. Implicit beliefs and motivation

According to the definition of self-efficacy, low self-efficacy means having low confidence in their ability to achieve a goal or complete a task. Those low self-efficacy students have a different implicit belief from the high self-efficacy students. According to research, they compared the Motivated Strategies for Learning Questionnaire (Testing self-efficacy) and Implicit Theory and Intelligence Scale. The research shows a significant relationship between self-efficacy and GPA. They also found that the achievement goal score of the high self-efficacy group was significantly higher than that of the low self-efficacy group. [16]

For the students with low self-efficacy, their implicit beliefs tend to consider they are not capable of completing difficult tasks, and they believe their intelligence is innate and unchangeable. On the contrary, the students with higher self-efficacy are more willing to challenge themselves and gain new knowledge when reaching new goals. Also, a significant correlation between self-efficacy and self-regulation states that the high self-efficacy students can regulate their impulses and persist when facing difficulties.

Moreover, a high level of academic motivation is key to gaining a high academic performance. Motivation means the desire to in service of a goal. With a higher desire for achievement, they are willing to put more effort into getting a higher academic performance. Research shows that there exists a positive correlation between the students' motivation test scores and GPAs. [17]

Under this situation, a high level of self-efficacy is an essential cause for a high level of motivation. Researchers found that for students with a high level of efficacy, a strong sense of competence contributes to cognitive processes and performance in a variety of contexts. Goal setting is an important process affecting motivation. With a proper goal, students will experience higher self-efficacy, and promise to complete the goal, which in turn affects their motivation. The correlational study done by the same researcher also implies a significant and strong relationship between self-efficacy and academic motivation.

4. Conclusion

From the previous article, we can conclude that generally, there is a positive correlation between self-efficacy and academic performance. However, the general self-efficacy doesn't have a significant

influence on grades. Self-efficacy is a more specific concept. Self-efficacy in one area seldom impacts the performance of another area. With a narrower situation evaluating self-efficacy, there will be a higher influence of self-efficacy on academic performance.

Also, higher self-efficacy can lead to higher academic performance in many ways. Those students with specific trouble with studying such as procrastination or losing motivation can try to improve their self-efficacy first. The article also includes some methods to improve students' self-efficacy. In future research, more studies should be done on specific methods to help students build self-efficacy in studying.

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