



# Impact Of Academic Self-Efficacy On Academic Achievement Of Secondary-Level Students In The Post-Pandemic Era

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## Abstract

The COVID-19 pandemic has completely changed the nature of the educational landscape. As a result, teachers, students, policymakers, and other stakeholders faced various challenges and situations that required them to adjust to those situations, in which psychological factors have played a specific role. The study of student's academic success is the central point of the entire educational landscape. Understanding the factors that impact students' academic success in the present moment is crucial for gaining insight into the educational environment. The present research paper assesses the impact of *Academic Self-Efficacy (ASE)* on the academic achievement of secondary level students without any disruption after the pandemic. Academic self-efficacy is a core component of social cognitive theory, which refers to a person's belief in this ability to complete academic tasks and achieve desired educational goals. Descriptive survey methodology has been used for the present study. The study has been conducted on a sample of 300 students using the simple random sampling method. The result of the study reveals that it is very important to train students with the necessary psychological factors that tend to enhance students' Self-Efficacy such as self-regulating learning, time management, regulation, collaboration and help seeking, etc. It is clear from the study that ASE gives students the ability to maintain high educational achievement without being affected by negative situations. Therefore, in the current era, the education system needs to be planned in a way that helps in increasing the ASE of students.

**Keywords:** Academic Self-Efficacy(ASE), Academic Achievement(AA), Post-Pandemic Era, Secondary level students

## Introduction

The COVID-19 pandemic that began in late 2019 disrupted the traditional education system, forcing schools and educational institutions to adopt remote and hybrid learning approaches. These changes have created unprecedented challenges for students, including technological disruptions, social isolation, and restructuring of the learning environment. As students go through this educational transformation, it is essential for them to examine the psychological factors that influence their academic success. One such factor is academic self-efficacy, which is derived from Bandura's social cognitive theory, which suggests that one's own beliefs about one's abilities and motivation have a significant impact on one's behaviour and academic performance. As students face new challenges in the post-pandemic era, their self-confidence plays a key role in determining their ability to adapt and succeed academically. Academic self-efficacy refers to an individual's belief in his ability to successfully complete academic tasks and achieve desired academic outcomes. It plays a key role in shaping students' motivation, resilience, and overall academic performance. Research conducted during the early stages of the pandemic (Lopez-Belmonte et al., 2021) shows that students with higher levels of academic self-efficacy adapted better to the transition to online

learning. Their confidence in their ability to succeed in this new environment played an important role in their academic performance.

In the wake of the global pandemic, the educational landscape has undergone significant changes, especially in secondary schools. The study of factors that contribute to academic success in this new era needs special attention from concerned educators and researchers. Consequently, an important aspect that needs attention is academic self-efficacy. The aim of the present study is to study the impact of academic self-efficacy on the academic achievement of secondary school students in the light of the post-pandemic educational environment. Students with high ASE can achieve high academic achievement by adopting good innovative educational methods (which were introduced during the Corona period) again without any disruption.

### **Post-Pandemic Educational Landscape**

The COVID-19 pandemic is a situation where everyone is struggling to survive by following certain specific rules, breaking away from their traditional ways. Educational practices were also not untouched by this. Distance learning and hybrid learning models were also widely adopted for the continuation of education. These changes have presented unique challenges to students, such as increased reliance on self-directed learning, less social interaction and limited access to resources. In this challenging scenario, it is necessary to clarify which psychological factors can help students to achieve their educational goals in a motivating and positive manner again after the global lockdown. In this perspective, attention has been drawn to academic self-efficacy to enable students to be self-motivated to learn and have full confidence in themselves. According to the self-efficacy theory given by Bandura, Goal Setting, Self-regulation, Social Persuasion and Outcome Expectation like motivational powers are developed in the student so that he can achieve educational goals in the best way by believing in his abilities. For proper educational outcomes it becomes important to investigate whether academic self-efficacy affects the academic achievement of students or not, it is in this perspective that the present research has been carried out.

### **Academic Self-Efficacy and Academic Achievement**

A significant relationship exists between academic self-efficacy and academic achievement. Students who have a strong belief in their abilities and who display a high level of academic self-efficacy are more likely to excel academically. The presence of high academic self-efficacy increases effort, motivation, and persistence when faced with challenges, all of which contribute to better academic performance. Academic self-efficacy has also been reported to be a significant predictor of academic performance by Sharma H.L. (2014) and Dogan, U. (2015). There has also been some other researches in the same area that provides evidence that academic self-efficacy has a relationship with academic related factors. Study by- Honicke et al.(2023) says that students with high academic self-efficacy are motivated to achieve higher academic performance. Luo, Q et al.(2023) this his study, showed that students with high self-efficacy are more likely to engage in learning activities, which increases their academic performance. Hinduja, P., et al. (2024) findings suggest that various factors including family support and behavioural aspects influence students' academic self-efficacy which is positively correlated with their academic performance. Self-efficacy is a central component of social cognitive theory, whereby students with higher self-efficacy perform better academically, as self-confidence directly impacts achievement given by Meera(2015) & Artino(2012).etc. Therefore, for post-COVID educational adjustment, academic self-efficacy needs to be paid attention to along with other psychological factors.

### **Review of Related Literature**

(Hosseinzadeh et al., 2021) found that academic self-efficacy was associated with students' ability to cope with the stresses brought about by the pandemic. Those with high self-efficacy were more likely to adapt to changes and continue their academic activities effectively. There is a need to study the effects of ASE on students' academic achievement even after COVID to ensure their high academic achievement. This means that studying ASE effect is necessary for high educational outcomes without disruption after the pandemic so that students demonstrate high academic successes without any negativity.

The report by UNESCO (2021), entitled 'Education: From Disruption to Recovery' highlights the importance of focusing on various psychological factors to ensure a smooth and uninterrupted educational

experience, free from any negative impact or disruption. According to the social cognitive theory, we can say that the study of academic self-efficacy for effective student learning is essential for high educational outcomes.

Gavin, V. (2020). Found that burnout is rampant in academia due to the pandemic. The study clearly highlights the detrimental impact of the pandemic on students' mental health and well-being. As a result, an urgent need arises to investigate the psychological factors that affect students' achievement. Therefore, in this study we can focus on a psychological factor academic self-efficacy that plays a vital role on students' self-confidence awareness and self-directed learning.

Nikčević, A.V., & Spada, M.M. (2020). COVID-19 Anxiety Syndrome Scale: Development and Psychological Properties. This study is helpful in developing an understanding of the influence of psychological factors on the mental health of children during the COVID-19 pandemic. Hence, there is a need for research work related to various psychological variables that can help students overcome the negative effects of the COVID pandemic and achieve high academic performance by believing in their own abilities. The present research focuses on such psychological variables that motivate students to achieve high academic success by believing in their own abilities.

Ponraj, D., et al. (2021). Conducted a research entitled Impact of the COVID-19 pandemic on academic self-efficacy and academic performance of graduate students: A mixed-method study Findings revealed a significant decline in academic self-efficacy among graduate students during the COVID-19 pandemic. The sudden shift to remote learning increased feelings of uncertainty and decreased confidence in academic abilities. Furthermore, the study identified a negative correlation between academic self-efficacy and academic performance, showing that even students with high self-efficacy had academic achievements that needed improvement. Hence, further study is needed on this for betterment of students' academic success.

Chemers, M.M., Hu, L.T., & Garcia, B.F. (2001) conducted a study on the relationship between academic self-efficacy, performance, and adjustment of first-year college students. Academic self-efficacy and optimism displayed a strong correlation with performance and adjustment. This correlation was observed directly on academic performance and indirectly through expectations and coping perceptions, particularly challenge-threat appraisal, which influenced class performance, stress levels, overall health, satisfaction, and commitment to continuing education.

Son et al. (2021) found in this study that the pandemic created many distractions and challenges for students, potentially affecting their motivation. Students with high academic self-efficacy were found to be more resilient in maintaining their motivation to learn during distance learning (Bandura, 1997;). Therefore, there is a need to study the impact of academic self-efficacy on academic achievement to maintain sustained high academic outcomes.

Rashid, S., & Yadav, S. S. (2020). The study found the pandemic has exposed the shortcomings of the current higher education system and highlighted the need for more training of teachers in digital technology to adapt to the world's rapidly changing education environment. There is a need to plan post-pandemic education and research strategies to ensure student learning outcomes and educational quality standards.

Morgan et al. (2022) studied the qualitative effects of COVID-19 on academic, technological and social experiences of higher education students in Taiwan. The study found that students from various streams preferred offline mode (in the humanities context) over online mode. The students attributed this to a lack of self-efficacy and university engagement. In terms of career planning, local students expressed minimal concerns about career changes, while international students expressed high levels of uncertainty, fear and pessimism in this regard. Therefore, in the context of the present research, it can be said that if students have high academic self-efficacy, they will be able to maintain the confidence to orient themselves towards their goals even in various adverse circumstances.

Magorokoshan et al. (2024) The present study focuses on the mental health of university-level students. The study mentions the psychological factor resilience which is useful for coping with adverse circumstances, adaptation, and developmental capacity. Also, the interactive relationship between this psychological factor and mental health outcomes after COVID-19 has been assessed. Based on the

findings, it can be clearly stated that the contribution of various psychological factors is particularly helpful for the mental health of students, hence special attention is required towards this.

The study conducted by Zhang et al. (2021) shows that the control and prevention of COVID-19 in nursing students has adversely affected their mental health. Therefore, there is a need to consider various factors of their mental health. Also, suggestions have been made to the concerned teachers about the need for special training. Therefore, it is clear that after COVID, there is a need to pay special attention to the psychological factors of students which will be useful for their good mental health and balanced development of a child.

To explore the impact of academic self-efficacy on the academic achievement of secondary-level students in the post-pandemic era, this study seeks to answer the following research questions:

- What is the impact of academic self-efficacy on academic achievement among secondary-level students in the post-pandemic era?

### **Emergence and Justification of the Study**

The COVID-19 pandemic introduced unprecedented challenges to the field of education. It has compelled students to adapt to various learning modes, such as remote, hybrid, and in-person learning. Understanding how academic self-efficacy influences students' adaptability to these changing environments is vital for designing effective educational strategies in the post-pandemic era. Understanding the role of academic self-efficacy in promoting emotional resilience and overall well-being can inform efforts to support students' mental health as they navigate the post-pandemic educational landscape. As educators and institutions continue to adapt their teaching methods, research on academic self-efficacy can guide the development of effective teaching and learning strategies. By delving into the impact of academic self-efficacy on academic achievement in the post-pandemic era, we can gain valuable insights that will shape the future of education. This research has the potential to revolutionize educational practices.

### **Statement of the Problem**

“Impact of Academic Self-Efficacy on Academic Achievement of Secondary-Level Students in the Post-Pandemic Era”

### **Objective of the study**

To study the impact of Academic Self-Efficacy on academic achievement of secondary level students.

### **Hypothesis of the Study**

H<sub>0</sub>: Academic Self-Efficacy has no significant impact on the academic achievement of secondary level students.

### **Key Terms Defined**

#### **• Secondary level Students**

Conceptual Definition

As per NEP-2020, in the 5+3+3+4 structure provided in the Academic and Curriculum Framework, Secondary level students refers to students studying in Class 9 to 12, whose age is between 14 to 18 years.

Operational Definition

In the presented research, secondary level means the students studying in class-9<sup>th</sup> falling in age group between 14 to 16 years.

#### **• Academic Self-Efficacy**

Conceptual Definition

According to Bandura and his colleagues, (1997) "Academic self-efficacy refers to an individual's beliefs about his ability to successfully complete an academic task at a specified level or achieve a specific educational goal."

Operational Definition

Academic self-efficacy can be defined as a student's belief in his capability to successfully engage in academic tasks and achieve educational goals, influenced by four key dimensions: Learning Skills, Goal Orientation, Locus of Control, and Self-confidence. Each dimension contributes uniquely to a student's overall academic self-efficacy.

## • Academic Achievement

### Conceptual Definition

According to Anastasi (1961) – “Educational achievement is the evaluation of the level of success achieved by the students which is expressed by the efforts of the students to understand the educational instructions and achieve the goals of the curriculum set according to their level and age.”

### Operational Definition

In the present research, academic achievement is the sum of marks obtained in all subjects in the annual examination by the students of the secondary level (Class-9<sup>th</sup>) of the CBSE board.

### Delimitations of the study

- The present research has been delimited to Agra city only.
- The present research has been delimited to the students of secondary level (Class-9<sup>th</sup>) of CBSE Board only, falling in the age group 14-16 years

## Research Design (Methodology)

### Variables of the Study

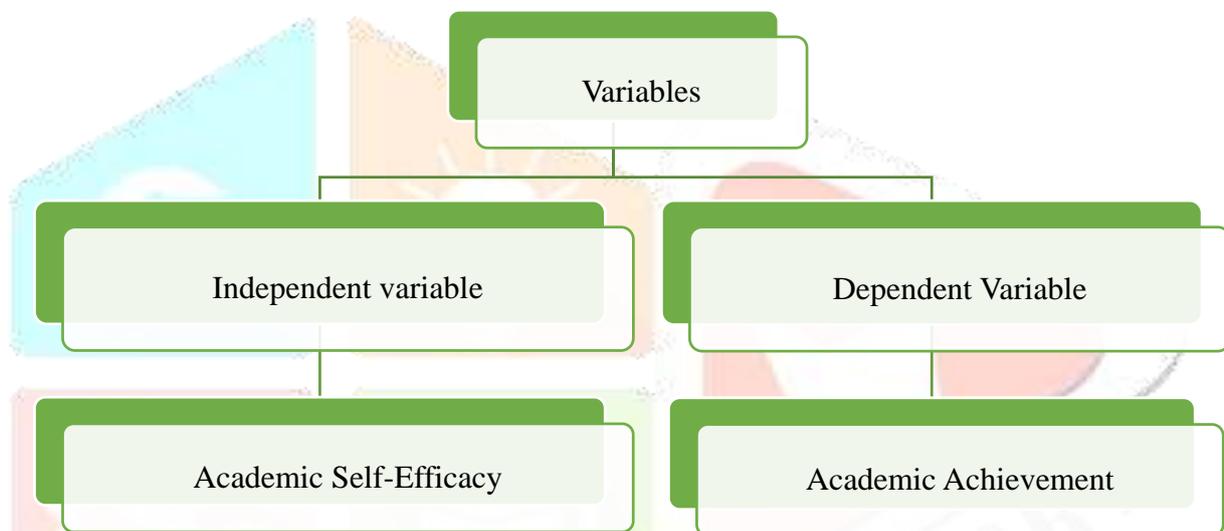


figure 1: variable of the study

### Design of study

#### Research method

“Descriptive Survey Research method” has been used in the present research study.

**Population** The population of the present research study includes all the secondary level students of CBSE board schools located in Agra city.

**Sample** The sample of the present research comprises of a total of 303 secondary level students studying in schools of CBSE board located in Agra city.

**Sampling** - Multi-stage random sampling method.

- First stage- 6 schools were selected through Simple random sampling method.
- Second Stage- 303 students from selected 6 schools were selected through simple random sampling method.

## Tools

### Measurement of Academic Self-Efficacy

In the present research study the researcher has used a self-made tool to measure 'Academic Self-Efficacy'.

**table - 1: description of tool**

Name of the Tool	Academic Self-Efficacy Scale (ASES)
Dimensions	<ul style="list-style-type: none"> <li>• Learning Skills,</li> <li>• Goal Orientation,</li> <li>• Locus of Control,</li> <li>• Self-Confidence.</li> </ul>
Language	English
No. of statements	24 (with 16 being positive and 8 being negative)
Level	14-16 years
Reliability	0.89 Cronbach's Alpha
Validity	0.90 Content Validity Index

### Measurement of Academic Achievement

To study academic achievement, the sum of the total annual marks obtained in all subjects by the students of secondary level (Class-9) was used.

#### Procedure

Data Collection-Data regarding academic self-efficacy and academic achievement were collected from the secondary level students with the help of related tool and grand total of annual marks obtained by the students respectively.

#### Analysis of data

Scoring for academic self-efficacy was done as mentioned in the manual; for positive statement scoring was done as 1, 2, 3, 4, and 5 for –‘Strongly Agree’, ‘Agree’, ‘Neutral’, ‘Disagree’, and ‘Strongly Disagree’ respectively and for negative statement scoring was done vice versa.

#### Statistical Treatment

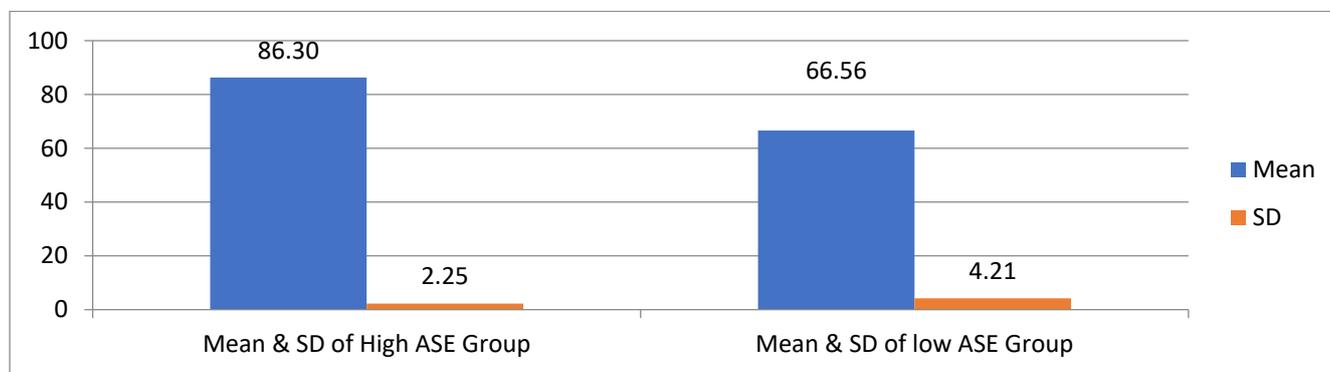
Statistical analysis was done using Mean, Standard Deviation, t-test, and NPC.

#### Result and Discussion

Objective - To study the impact of Academic self-efficacy on academic achievement of secondary level students.

The high Academic Self-Efficacy (ASE) Group boasts an impressive mean academic achievement score of 86.30, with a standard deviation of 2.25. In contrast, the low ASE Group has a mean academic achievement score of 66.56, with a standard deviation of 4.21. This data clearly indicates that students with higher academic self-efficacy tend to achieve higher academic scores.

Furthermore, the smaller standard deviation in the high ASE Group suggests that there is less variability in their scores compared to the low ASE Group. This means that students in the high ASE Group are more consistent in their academic performance, while those in the low ASE Group exhibit more variation in their achievement levels.



**Figure - 2: Mean & SD of Academic Achievement of High and low ASE groups**

The data indicates that students who possess a strong belief in their academic abilities, known as academic self-efficacy (ASE), tend to excel in their academic endeavors and achieve more consistent scores. Conversely, students with lower levels of ASE typically demonstrate poorer academic performance and greater variability in their scores.

**Table - 2: Academic Self-Efficacy and Academic Achievement**

Variable	N	n	M	D	$\sigma_D$	t	Significance
Academic Achievement of High Academic Self-Efficacy Group	303	36	86.30	2.25	0.88	7.12	Significant at 0.01 level
Academic Achievement of Low Academic Self-Efficacy Group		18	66.56	4.21			

The t-value ( $t = 7.12$ ) is significant at the 0.01 level, indicating a less than 1% probability of the result occurring by chance and confirming a statistically significant difference between the two groups regarding Academic Achievement and Academic Self-Efficacy. The mean scores reveal that the high self-efficacy group ( $M = 86.30$ ) outperforms the low self-efficacy group ( $M = 66.56$ ), demonstrating a positive relationship between self-efficacy and academic achievement. The effect size difference ( $D = 2.25$  for the high group and  $D = 4.21$  for the low group) further underscores the moderate impact of self-efficacy on performance. Additionally, the observed difference ( $\sigma_D = 0.88$ ) highlights variability in the relationship without undermining the significance of the results. The calculated value is much higher than the tabulated value, so we can say that academic self-efficacy is highly influential for academic achievement. As per analysis it is found that null hypothesis has been rejected. So, we can say that Academic Self-Efficacy has directly impacted on academic achievement of secondary level students.

### Findings of the Study

The analysis indicates that Academic Self-Efficacy has a significant impact on Academic Achievement, with students possessing high self-efficacy outperforming their peers with low self-efficacy, a difference found to be statistically significant at the 0.01 level, highlighting the critical need to foster Self-efficacy to improve academic outcomes.

### Conclusion

After analyzing the data, it is evident that ASE has a positive impact on students' academic achievement. High ASE helps students set goals and regulate themselves effectively. By setting clear, attainable goals and developing strategies to reach them, students engage in self-regulated learning. This method involves planning, monitoring progress, and adjusting strategies as necessary, ultimately leading to improved academic performance. Furthermore, high ASE fosters intrinsic motivation, encouraging students to persist and remain motivated in their learning endeavours. When faced with challenges, students with high ASE exhibit determination and resilience, rather than becoming discouraged. This persistence results in increased effort, deeper learning, and ultimately better academic outcomes. Students with high academic self-efficacy also excel in time management, prioritizing tasks and avoiding procrastination. This enables

them to complete assignments on time, adequately prepare for exams, and balance academic responsibilities with extracurricular activities, ultimately leading to higher academic achievement. Therefore, academic self-efficacy serves as a key predictor of student success. By promoting goal setting, motivation, effective learning strategies, time management, and emotional regulation, students can enhance their academic performance. It is crucial for students to plan their learning activities in a way that aligns with their capabilities and abilities, while also monitoring their progress towards achieving their goals. In the post-pandemic era, academic self-efficacy plays a significant role in the academic achievement of secondary level students. By fostering a sense of control and resilience, students can continue to learn and grow despite external challenges, ensuring continuous academic success.

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