

# Relationship between Growth Mindset and Academic Achievement of Psychology Students

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**Abstract:** *The issue of low student academic achievement is an essential concern in the world of higher education, especially among psychology students. One psychological factor thought to influence academic achievement is a growth mindset, which is an individual's belief that intellectual abilities can be developed through effort and learning. This study aims to determine the relationship between a growth mindset and the academic achievement of psychology students. The research method employed is quantitative correlation, using a sample of 100 students from the Psychology study program at one of Indonesia's universities. The instrument used in this study is a growth mindset scale, prepared based on Carol Dweck's theory and academic achievement data, as reflected in student GPA. The results of the data analysis, using the Pearson correlation test, showed a significant positive relationship between growth mindset and academic achievement. That is, the higher the growth mindset students possess, the higher their academic achievement. This finding supports the importance of developing a growth mindset in an academic environment as a means to enhance student achievement.*

**Keywords:** *growth mindset, academic achievement, psychology students, mindset, higher education*

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## 1. Introduction

The issue of improving the quality of human resources has become a global focus, especially in the field of higher education. In the era of globalization and the Industrial Revolution 4.0, students' academic success is not only determined by intellectual abilities, but also by supporting psychological factors, one of which is mindset. In various developed countries, such as the United States and Finland, educational approaches have begun to emphasize the importance of a growth mindset as the foundation of sustainable learning. Global educational trends in countries such as the United States and Finland have started shifting toward fostering a growth mindset as a foundation for lifelong learning and student resilience (Dweck, 2006). Growth mindset is defined as the belief that one's basic abilities can be developed through dedication and hard work. This belief creates a high learning spirit and resilience in the face of failure, two fundamental aspects of academic success.

In Indonesia, the quality of higher education continues to face serious challenges. One of the main problems is the low motivation to learn and academic achievement among students, including those in Psychology study programs. According to data from the Ministry of Education and Culture (2022), many students experience

difficulties in achieving optimal academic performance due to various factors, both from within the student and from the environment. Some of the internal factors that influence learning include a lack of intrinsic motivation, a fixed mindset, and low self-regulation skills. This problem is particularly relevant among psychology students, who, despite being trained in understanding psychological constructs, often experience academic burnout and self-regulation issues (Susanto, 2021).

These factors have a significant impact on students' academic performance. When students have a fixed mindset, they tend to avoid challenges, give up quickly, and feel that intelligence is something that is fixed and cannot be changed. This results in low initiative to learn and adapt to change as well as decreased enthusiasm in the face of academic failure (Blackwell, Trzesniewski, & Dweck, 2007). In contrast, students with a growth mindset view failure as part of the learning process, using it as an opportunity to develop and become more diligent in addressing existing shortcomings. Therefore, understanding the relationship between a growth mindset and academic achievement is important to address current educational challenges.

In more detail, a growth mindset is a concept introduced by Carol Dweck (2006), which states that individuals with a growth mindset believe that intelligence and abilities can be developed through effort, effective learning strategies, and help from others. In contrast to a fixed mindset, which views talent as something fixed and unchangeable, a growth mindset emphasizes the importance of process and hard work in achieving success. In the context of psychology students, the application of a growth mindset becomes relevant because they are not only learning about psychological theories, but are also expected to understand and manage psychological aspects within themselves. Previous research has demonstrated a significant relationship between a growth mindset and improved learning outcomes, increased academic engagement, and enhanced resilience to academic pressure (Yeager & Dweck, 2012).

The novelty of this study lies in its focus on psychology students in Indonesia, which is still rarely discussed in the context of the relationship between a growth mindset and academic achievement. Although numerous studies on growth mindset have been conducted abroad, similar studies in the local context, particularly among psychology students, remain limited. Psychology students possess their uniqueness in the learning process because they are required not only to understand the theory but also to reflect on and apply it to themselves and in social interactions. Therefore, this research is important to determine whether a growth mindset plays a significant role in their academic achievement, so that it can serve as a basis for developing learning strategies and enhancing student character development.

The urgency of this research is to address the need for a learning approach that is not only results oriented but also focused on the process of student self

development. In today's educational landscape, there is a shift from conventional approaches to more humanistic and positive psychology based approaches. A growth mindset is one of the key components in this approach. Therefore, understanding how a growth mindset affects students' academic performance will help educational institutions design more effective psychological interventions and learning strategies.

The purpose of this study is to investigate the relationship between a growth mindset and the academic achievement of students in the Psychology study program. By employing a quantitative correlational approach, this study aims to determine the extent to which a growth mindset influences students' academic achievement, while also providing a deeper understanding of the significance of cultivating a growth mindset in higher education.

The benefits of this research are divided into two aspects, namely theoretical benefits and practical benefits. Theoretically, this research is expected to enrich the scientific treasures in the field of educational psychology, especially regarding the role of a growth mindset in supporting student learning success. The findings of this study can serve as a reference for further research on learning motivation and other psychological factors. Practically, the results of this study can be used by lecturers, academic counselors, and higher education policy makers to design student self-development programs based on strengthening a growth mindset. Additionally, students can gain a deeper understanding of the importance of developing a growth mindset to achieve academic success.

## 2. Method

This study employs a qualitative descriptive approach, which enables researchers to describe the measurable relationship between the two primary variables: growth mindset and academic achievement. This research was conducted in one of the private universities in Indonesia that has a Psychology study program. The selection of this location was based on the consideration that the campus has diverse student characteristics in terms of social background, learning motivation, and variations in academic achievement, thus enabling a richer and more representative picture of the dynamics of growth mindset among psychology students.

The population in this study consisted of all active undergraduate students in the Psychology program at the university under study, specifically those in the first year (S1). The total population of students at that time was around 300 people spread across the levels of semester 1 to semester 8. However, because this study requires academic data and the maturity of respondents in filling out the questionnaire reflectively, students in semester 4 and above were selected as the target of data collection. Based on these criteria, the study used 100 samples, comprising 100 students. The determination of the sample was carried out purposively, considering

that students at this level have had extensive academic and learning experiences, which enables them to provide more accurate and meaningful responses related to their perceptions of their mindset and academic achievements.

The data collection process is carried out by distributing questionnaires directly to students who meet the specified criteria. Students were given an explanation of the study's purpose, as well as an assurance that all data provided would be kept confidential and used solely for scientific purposes. Responses from participants were then coded and entered into analysis software to test the relationship between variables.

For data analysis, this study employed descriptive statistical analysis to describe the distribution of students' growth mindset levels and their academic achievements (measured by GPA). Furthermore, inferential analysis using Pearson's product-moment correlation test was conducted to examine the relationship between the growth mindset variable and academic achievement. The analysis was performed using SPSS (Statistical Package for the Social Sciences), with a significance level set at  $p < 0.05$ . To ensure the reliability of the Growth Mindset Scale, Cronbach's alpha was calculated. Prior to conducting the correlation analysis, normality and linearity assumption tests were also performed to validate the appropriateness of the statistical method used.

### **3. Results & Discussion**

Based on the demographic data collected, the majority of respondents were female, accounting for 72%, while men made up 28%. This reflects the general distribution in the Psychology study program, where women generally dominate. The participants' ages ranged from 20 to 24 years, with an average age of 21.7 years. Most participants were in their sixth semester (40%), followed by their fourth semester (30%) and eighth semester (30%). The student GPA used as a reference in this study is the GPA from the last active semester, verified through the faculty's academic system. In terms of academic achievement, the majority of respondents have a GPA above 3.00, with the following distribution: 16% have a GPA between 2.50 and 2.99, 38% have a GPA between 3.00 and 3.49, and 46% have a GPA above 3.50. This distribution indicates that most respondents have achieved good academic results, although there is still sufficient variation to warrant further analysis.

#### **Specific Growth Mindset Variables**

The growth mindset variable is measured through a scale compiled based on indicators from Carol Dweck's theory. The scale consists of 20 statement items with five answer options using a Likert scale (1 = strongly disagree to 5 = strongly agree).

According to the data processing results, the average score of respondents' growth mindset fell within the high category, with an average score of 76 out of a maximum total score of 100. This suggests that, in general, Psychology study program students who serve as research subjects tend to believe that intelligence and academic ability can be developed through continuous effort and learning.

### **Relationship between Growth Mindset and Academic Achievement**

The primary analysis of this study aimed to answer the core question: Is there a relationship between a growth mindset and academic achievement among psychology students? Based on the results of the Pearson correlation analysis, a significant positive relationship was found between growth mindset scores and students' GPAs ( $r = 0.517, p < 0.01$ ). This result indicates that the higher the level of growth mindset possessed by students, the greater their tendency to achieve academically.

This statistical result indicates that students with a higher growth mindset tend to demonstrate better academic performance. In other words, the stronger a student's belief that intelligence and abilities can develop through effort and learning strategies, the more likely they are to achieve a higher GPA.

These findings are aligned with previous research (e.g., Dweck, 2006; Yeager & Dweck, 2012), which emphasizes that students who adopt a growth mindset are more resilient, embrace challenges, and maintain motivation even after academic setbacks – factors that collectively contribute to improved learning outcomes. Therefore, fostering a growth mindset may serve as a crucial psychological resource in enhancing academic success among university students.

### **Data Grouping Based on Growth Mindset Categories**

To strengthen the analysis, growth mindset data were categorized into three major groups: low (scores  $< 60$ ), medium (scores 60-79), and high (scores  $\geq 80$ ). When compared with GPA, the following pattern was found:

1. Students with a low growth mindset have an average GPA of 2.98.
2. Students with a moderate growth mindset have an average GPA of 3.23.
3. Students with a high growth mindset have an average GPA of 3.52.

This data provides a picture consistent with the correlation analysis, indicating a positive trend between a growth mindset and academic success. Thus, a growth mindset can be identified as one of the psychological factors that contribute to student achievement.

### **Gender, Semester, and Growth Mindset**

We also conducted additional exploration on whether there were significant differences in growth mindset based on gender and semester level. The results of the analysis showed that there was no significant difference between men and women in terms of growth mindset ( $p > 0.05$ ), although the average score of women was slightly higher. This suggests that gender is not the dominant determinant in the formation of a growth mindset. However, there are interesting differences based on semester. Students in semesters 6 and 8 tend to have higher growth mindset scores than those in semester 4. This is thought to be because the longer students are in an academic environment, the greater their opportunities are to face challenges and learn from failures, allowing their growth mindset to develop over time.

In contrast, analysis at the semester level demonstrated a more noteworthy pattern. Students in semester 6 and semester 8 tended to exhibit higher growth mindset scores compared to those in semester 4. This trend suggests that exposure to prolonged academic experiences, including coursework challenges, feedback loops, and personal academic reflection, may foster a stronger belief in self-development and the value of effort over time.

Such findings imply that the academic journey itself contributes to shaping students' mindsets, particularly as they progress through higher levels of study. This supports the idea that a growth mindset is not a static trait, but rather a developable disposition that may evolve through continuous engagement in complex academic tasks, overcoming setbacks, and interacting with psychologically supportive learning environments.

These insights offer practical implications for higher education institutions: early-semester interventions focused on mindset cultivation could help optimize student resilience and learning outcomes across all academic stages.

### **Implications of Findings for Learning and Academic Strategies**

These findings indicate the importance of integrating growth mindset reinforcement in curricula and learning activities in higher education settings. Students who have successfully built a growth mindset are proven to be better able to navigate academic challenges more adaptively. Therefore, educational institutions can develop positive psychology-based training or mentoring programs that aim to form a growth mindset in students from the beginning of the lecture. Furthermore, lecturers as learning facilitators can play an important role in shaping students' mindsets through the delivery of material, the provision of evaluation, and communication patterns that build student motivation and confidence. Strategies such as providing process based feedback (not just the result), encouraging the exploration of ideas, and creating a classroom culture that is safe for making mistakes are approaches that have proven effective in fostering a growth mindset (Boaler, 2016).

Through the empirical findings obtained, this study successfully addresses its primary objective, which is to demonstrate a significant relationship between a growth mindset and the academic achievement of psychology students. Not only does this study reveal the relationship, but it also illustrates how the growth mindset score is distributed across various student groups and identifies the academic behavior trends that accompany it. These findings provide empirical justification that mindset-based psychological interventions can be a strategic approach to improving academic quality at the tertiary level. The primary issue addressed in this study is the low academic achievement of students in various universities, including those in Psychology programs. In the context of higher education, academic achievement is a crucial indicator of a student's success in absorbing material, applying knowledge, and demonstrating the cognitive and affective skills necessary to compete in the professional world. Therefore, the urgency of this research lies in the effort to find psychological factors that can significantly affect these achievements, one of which is a growth mindset.

This study demonstrates a significant positive relationship between a growth mindset and academic achievement. With a correlation value of 0.517 ( $p < 0.01$ ), it was found that students who have a high level of growth mindset tend to achieve a higher GPA than those with a fixed mindset. This reinforces the notion that academic success is not only determined by intelligence or educational background, but also by how students view themselves when facing academic challenges.

The underlying condition of this research is the gap between students' intellectual potential and their academic achievements. Many students have good potential, but fail to demonstrate optimal academic performance due to low motivation, limited learning resilience, and a perception of failure. One of the leading causes is the fixed mindset that is still rooted in some students. They feel that their abilities are limited and cannot be improved, so they often give up when faced with obstacles. This mindset hurts the way they study, respond to assignments, and face exams.

In this study, students with a low growth mindset showed an average GPA of only 2.98, while those with a high growth mindset achieved an average GPA of 3.52. This difference not only reflects academic success in terms of grades, but also shows differences in approach to the learning process. Students with a growth mindset view difficulties as challenges that must be overcome, whereas students with a fixed mindset perceive them as the ultimate limit of their abilities. This finding aligns with Dweck's (2006) theory, which posits that individuals with a growth mindset are more likely to persevere in the face of failure and employ new strategies to overcome challenges.

The existence of a fixed mindset in students does not happen suddenly. Several factors cause students to fail to form a growth mindset, including:

### **1) A Competitive and Value Based Education Environment**

A results-oriented education system tends to instill the mindset that intelligence is fixed. Students tend to focus more on achieving high grades rather than understanding the learning process. As a result, when faced with poor grades, they perceive it as a permanent failure, rather than as feedback to improve.

### **2) Lack of Support and Constructive Feedback**

An academic environment that fails to provide constructive feedback can cause students to lose direction in their self-improvement. They tend to blame external factors or give up on the situation.

### **3) Lack of Exposure to Growth Mindset Concepts**

Most students have never been introduced to the concept of a growth mindset. Understanding this concept can change the way they view learning and achievement. Without character education and psychological training, students lack the conceptual tools to develop a growth mindset.

## **Integration of Growth Mindset in the Academic Environment**

The solution to this problem lies in the importance of strengthening the growth mindset early on through various systematic approaches within the campus environment. Based on the research findings, the following strategies can be used as a reference:

### **1) Character Education Based on Positive Psychology**

The integration of a growth mindset into the character education curriculum allows students to understand from the beginning that their abilities are not fixed. Through reflective learning activities, group discussions, and the use of case studies of failures faced by significant figures, students can learn to appreciate the process and effort involved.

### **2) Teaching Strategies by Lecturers and Academic Advisors**

Lecturers play a strategic role in fostering students' growth mindset. By providing feedback that emphasizes the process, not just the results, students will feel valued for their efforts, not solely for the grades they obtain. Strategies such as

praising efforts, inviting reflection on mistakes, and teaching new learning strategies are crucial.

### **3) Psychological Training and Assistance**

Psychology service units on campus can organize training-based programs to foster growth mindset development. Through workshops, seminars, and group guidance, students are encouraged to develop a deeper understanding of their self-concept, set realistic learning goals, and effectively manage academic stress.

### **4) An Academic Culture that Encourages Experimentation and Failure**

Campuses must create an academic culture that does not punish failure, but instead uses it as a source of learning. Students are encouraged to experiment, try new approaches to learning, and evaluate the results constructively.

## **Impact of Growth Mindset Implementation on Students**

If the growth mindset is successfully formed and widely applied in the academic environment, then various positive impacts can be achieved:

### **1) Improving the Quality of Student Learning**

Students will learn with intrinsic motivation, not solely due to external pressure. This increases their cognitive, metacognitive, and affective engagement in learning.

### **2) Academic Resilience**

Students with a growth mindset are more resilient in the face of failure, have better problem-solving skills, and are more able to bounce back after experiencing academic stress.

### **3) Improved GPA and Academic Satisfaction**

As shown in the research results, students with a high growth mindset have a higher GPA. Additionally, they are more satisfied with their learning process because they feel they have control over their achievements.

### **4) Contribution to the World of Work and Careers**

After graduation, students with a growth mindset will be better prepared to face the challenges of the working world. They are not afraid to fail, keep learning, and are open to feedback, all of which are key competencies in the VUCA (volatility, uncertainty, complexity, ambiguity) era.

Comparisons with previous studies, such as those by Blackwell et al. (2007) and Yeager & Dweck (2012), reveal similarities in the direction of the positive relationship between growth mindset and academic achievement. However, this study strengthens the evidence in the local Indonesian context, specifically among psychology students. In addition, this study confirms that although psychology

students learn theories about motivation and cognition, they still require specialized coaching to apply a growth mindset in their own academic lives.

Another novelty lies in the explorative approach to semester and gender distribution, which suggests that growth mindset development tends to increase with the length of time spent in the academic environment. This opens up opportunities for longitudinal exploration in future research.

#### 4. Conclusion

Based on the findings obtained, it can be concluded that there is a significant positive relationship between the level of *growth mindset* and student academic achievement, as measured by the cumulative grade point average (GPA). Students who possess a growth mindset tend to exhibit higher academic performance compared to those with a fixed mindset. This study makes a significant contribution to the educational psychology literature by confirming that a growth mindset is a psychological variable that plays a crucial role in supporting student learning success. The significance of this study lies in its focus on the population of psychology students in Indonesia, which has been underutilized as an object of study regarding growth mindset variables. Additionally, this study offers a practical overview of the importance of mindset-based academic interventions in supporting student achievement. The significance of this study lies in its focus on the population of psychology students in Indonesia, which has been minimally used as an object of study concerning *growth mindset* variables. However, this study has limitations in its scope, as it only includes respondents from one educational institution and does not consider other external variables, such as socioeconomic conditions, family support, or learning strategies, that may also affect academic outcomes.

Practically, the results of this study provide a basis for higher education institutions to develop mindset-based interventions, such as self-development training, mentoring programs, or academic counseling that emphasize the importance of effort, perseverance, and learning from mistakes. Lecturers and academic advisors can use these findings to change their learning approaches to be more supportive of students' mindset development, especially in the early semesters, so that they do not give up easily when facing academic challenges.

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