



The Relationship between Academic Mindset and Academic Performance: A Case of Gedu College of Business Studies, Bhutan

Sonam Wangmo ^{a*} and Kinga Wangpo ^b

^a Gedu College of Business Studies, Royal University of Bhutan, Bhutan.

^b Gedu college of Business Studies, Bhutan.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Article Information

DOI: <https://doi.org/10.9734/ajarr/2024/v18i7699>

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/118695>

Original Research Article

Received: 25/04/2024

Accepted: 26/06/2024

Published: 28/06/2024

ABSTRACT

Aims: This study attempted to assess how students' academic mindset influences their academic performance and secondly, whether academic mindset differ across demographic variables like gender. Four academic mindset factors were examined by the researchers.

Study Design: A quantitative research design with a descriptive study was used in this study.

Place and Duration of Study: The study was conducted in Bhutan for a period of one year.

Methodology: A total of 314 students from Gedu College of Business studies of Bhutan participated in the study using an online structured questionnaire developed by the researchers and shared through Google Forms. Simple random sampling technique was employed to draw the samples from the given population. The results were analyzed and presented using regression analysis and independent T-Test.

*Corresponding author: E-mail: Sonamwangmo.gcbs@rub.edu.bt;

Cite as: Wangmo, Sonam, and Kinga Wangpo. 2024. "The Relationship Between Academic Mindset and Academic Performance: A Case of Gedu College of Business Studies, Bhutan". *Asian Journal of Advanced Research and Reports* 18 (7):246-55. <https://doi.org/10.9734/ajarr/2024/v18i7699>.

Results: According to the findings, there is a positive relationship between variables of academic mindset such as self-efficacy and growth mindset with academic performance. Secondly, in terms of gender, there is difference in terms of view on the self-efficacy variable.

Conclusion: The key recommendations of the study is for intervention from academic institutions to help students develop a growth mindset and also improve the self-efficacy of the students to draw better academic results.

Keywords: Academic mindset; academic performance; college; students.

ABBREVIATIONS

GCBS : *Gedu College of Business Studies*
AP : *Academic Performance*
SE : *Self Efficacy*
RAE : *Relevance of Academic Experience*
SOB : *Sense of Belonging*
MS : *Mind Set*

1. INTRODUCTION

Academic success is indicated by the student's average marks and college retention and graduation. Students however leave college before completing it or perform very poorly academically for a variety of reasons, one of which is academic difficulty [1]. One of the key challenges confronting Bhutanese higher education is the perceived decline in the quality of education and the standard of university graduates as observed in students' performance in year-end examinations and the PISA-D test administered to students in Bhutan [2-5]. Programme for International Student Assessment (PISA) developed by the Organization for Economic Corporation and Development assess 15-year olds' proficiency in reading, mathematics, and science measuring students' skills in applying what they have learned in school to real-life situations. Following the royal decree, the education sector of Bhutan is going through reforms in terms of making the education programs more relevant with a focus on STEM (science, technology, engineering, and mathematics), investing in infrastructures, improving research culture [6]. However, academic institutions and policymakers usually undermine the value of students' psychology that influences their learning, success, and character to deal with any academic challenges in their life. Academic achievement is a key factor in determining a student's educational success and progression. As a community, the belief that the greatest approach to enhance student outcomes was to have better students who were cognitively/intellectually talented, have the best

and most relevant educational programs and use validated teaching pedagogies. However, researches currently demonstrate that non-cognitive factors such as mindset also have an impact on students' learning and academic success. Thus, the current study will be significant in the following ways:

1. To begin with, the first objective will aid colleges and teachers in recognizing the importance of students' mindsets as one of the driving forces behind assuring students' academic achievement, resulting in a learning atmosphere where students are appreciated and encouraged in their abilities and efforts. Colleges that recognize these mindset phenomena can be even more beneficial to their students by putting in place the required interventions, such as having experienced advisors mentor identified students with difficulties, etc...
2. Developing educational policies or classroom practices that emphasize the learning process, such as endeavoring to instill a positive mindset in students during their formative and early academic years. Students will benefit immensely academically by having a positive outlook, as well as teaching the character of grit and confidence in their ability to confront any challenge be it related to different courses to name a few.
3. It will contribute to the existing literature of educational psychology.

Consequently, this study tries to examine how students' academic mindset influences their academic performance. Researchers in this area of academic mindset have majorly focused on school-going children. In this study, the researchers have focused on college students. Hence, the objectives of the study are:

1. To determine the relationship between student's academic mindset and their academic performance.

2. Does academic mindset differ across demographic variables like gender?

H1: There is a positive relationship between self-efficacy and academic performance.

H2: A growth mindset is positively related to academic performance.

H3: Relevancy of academic experience has a positive relationship with academic performance.

H4: There is a positive relationship between a sense of belonging and academic performance.

2. LITERATURE REVIEW

The academic mindset encompasses the individuals' beliefs about the ways learning and intelligence work. These beliefs shape students' thinking, influence how they understand situations, and, as a result, have an impact on their success [7]. The Center identified and studied four components of academic mindsets which are the variables for this study:

2.1 Growth and Fixed Mindset

Is concerned with the students' perceptions of the potential for change in their intelligence. The earliest research on mindset was done by Carol S. Dweck and her colleagues. Fixed mindset people feel that attributes like intelligence are engraved in stone whereas Growth mindset people, on the other hand, think that one's basic attributes are things one can cultivate through efforts, plans, and aid from others [8]. Children who feel intelligence can be improved seek the learning goal of improving their competence, whereas those who believe intelligence is a fixed entity are more inclined to pursue the performance goal of obtaining positive assessments [9]. Research has also shown that students who hold an incremental/ malleable theory of intelligence (growth mindset) had a positive association with effort beliefs, motivations, and academic performances in mathematics subjects [10]. Mindsets also influence how one deals with failure: students with growth mindsets pay more attention to corrective feedback following errors and try to improve their subsequent performances [11]. Sheridan and Carr [12] investigated the relationship between psychological traits and academic success of first-year engineering

students by studying three factors; personality type, grit, and mindsets of the students. Amongst the three factors, students' academic mindsets were found to influence their academic success. The researchers suggest educators identify students who are fixed-minded and intervene to change their mindset.

2.2 Self-Efficacy

This refers to the students' confidence in their ability to be successful in their coursework [7]. The concept of academic self-efficacy was provided by Albert Bandura in 1993 and was later extensively researched by many. Children's beliefs in their ability to regulate their learning activities, courses work, and master difficult subject matter affect their academic motivation, interest, and scholastic achievements [13]. Cassidy [14] noted that Self-efficacy beliefs are linked to psychological resilience in individuals; having positive self-efficacy beliefs is likely to lead to higher academic resilience in undergraduate students. [1], examined how College students' academic mindsets are associated with their college performance (indicated by the students' overall average grades) and the students' first to second-year retention. The researchers studied in depth three constructs of academic mindsets; academic self-efficacy, motivation, and sense of belonging. They concluded that students who scored high on all three constructs were likely to succeed academically. Out of the three constructs, academic self-efficacy was more closely associated with the students' academic performances. [15], reported that Students who are confident in their academic ability can develop academic goals that will drive them to academic success. Young people who are insecure about their academic ability may be less likely to prepare for higher levels of education that demand advanced academic skills and more effort to succeed.

2.3 Relevance of Academic Experience and 4. Sense of belonging

Academic experience encompasses students' views of whether their college work is preparing them for future success. While the sense of belonging is students' perceptions of whether they are accepted members of their college community. Students who believe that the course materials they are studying will be useful in the future workplace see immediate value in their current academic endeavours and are

encouraged to do well academically, much as students who feel socially welcomed on campus are [16]. Booker [17], in qualitative research, to understand how the sense of belonging and classroom community influences African American undergraduate women's degree persistence reported that faculty and peer in the learning environment can either facilitate or become an obstacle to students' sense of belonging. Faculty who are engaging, relatable, accessible both inside and outside of the classroom, and show interest in the wellbeing of the students, in addition to peers who are open and helpful, create an environment where students feel belonged, and this sense of belonging motivates students to engage and perform better. Jones et al. [18] reported that students' perceptions of their courses, as evaluated by characteristics such as empowerment, usefulness, success, interest, and caring, predict their effort and grades, with the usefulness of the course content and students' interest being closely linked to effort and grade.

3. MATERIALS AND METHODS

3.1 Design/ Approach

The study has adopted a descriptive approach, as that would be a suitable approach for studies that aim to describe and analyze a given phenomenon as it exists in reality through collecting needed data. The goal of descriptive research is to describe a phenomenon and its characteristics. This research is more concerned with what rather than how or why something has happened. Therefore, observation and survey tools are often used to gather data [19]. The study's theoretical framework is based on the four constructs of mindset identified by the

Center for Community College Student Engagement, The University of Texas at Austin. The indicator for students' academic performance for this study includes the student's engagement in class and students' performance to date. This study has used five Likert scale items to measure participants' academic mindset via a survey questionnaire. The conceptual framework for the current study is adapted from the report published by the Center for Community College Student Engagement, University of Texas, which were found to be the common variables of academic mindset in this research area.

3.2 Population and Sample

The total number of students in Gedu College of Business Studies stood at 1447 when the study was conducted [20]. The sample size was obtained by using sample size Taro Yamane sample calculation at a 95% confidence level, a confidence interval of 5% with a total population of 1447 [21]. To select the samples from the given population, a simple random sampling technique was employed giving equal chance to each respondent in the population for being selected in the sample [22]

$$n = \frac{N}{1 + N(e)^2}$$

$$n = 1447 / 1 + 1447(0.05)^2$$

$$n = 313.4$$

Where,

n= sample size

N= population

e = margin of error (5%)

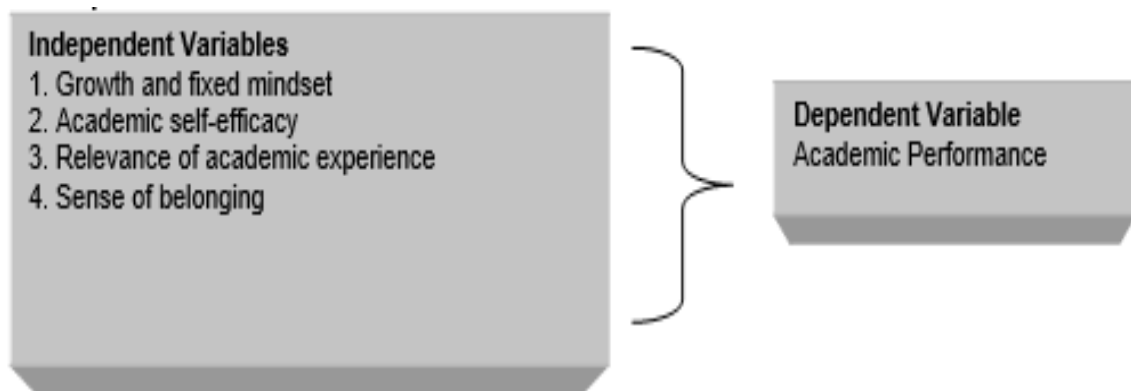


Fig. 1. Conceptual framework

3.3 Data Collection Instrument and Analyses Tools

The research is based on Primary data collected from the students of Gedu College of Business Studies under the Royal University of Bhutan through a structured questionnaire. Primary data are those which are collected afresh and specific to the research objectives which makes the data more reliable [22]. Structured questionnaires are easy to use and evaluate with predetermined responses and options [22]. A pilot survey was conducted using Google Forms taking fifty respondents from Gedu College to test the reliability of the questionnaire items and the final survey questionnaire was also administered through the use of Google Forms.

Mindset has been measured using the 8-item implicit theories of the intelligence scale [23]. Items that were negatively worded were reverse coded and the eight items were averaged with a higher score indicating a growth mindset.

Descriptive analysis was used to analyze and represent the demographic data. Inferential statistics like regression analysis were employed to test the relationship between the academic mindset and academic performance. Linear regression is used to test the causal relationship between two sets of data when there is only one dependent and one independent variable [24]. And lastly, an independent sample T-test was used to compare mean differences among groups like gender

Table 1. Reliability test

| Construct | Cronbach's Alpha | No. of items |
|----------------------------------|------------------|--------------|
| Academic Performance | .653 | 3 |
| Mindset | .673 | 8 |
| Self-efficacy | .878 | 10 |
| Relevance of academic experience | .889 | 6 |
| Sense of Belonging | .828 | 11 |

2.4 Reliability

To assess the reliability of the instrument employed in this study, a reliability test was conducted as shown in Table 1. Cronbach alphas for each construct are .653 for Academic

performance, .673 for mindset, .878 for self-efficacy, .889 for relevance of academic experience, and, .828 for sense of belonging. As per the calculated values, measurement items used in this study are reliable and acceptable as the values of Cronbach's alpha are all above 0.6 [25].

4. RESULTS AND DISCUSSION

4.1 Regression Analysis

The value of adjusted R square is .320 indicating that 32% of the variance in the independent variable Academic Performance is predicted or explained by the model/ independent variables as shown in Table 2.

As per the coefficients table, out of the four predictor variables, self-efficacy and growth mindset are found to be significant with a value of $P < 0.05$. SE (self-efficacy) with a beta value of .370 and MS (growth mindset) with a beta value of .287 both contribute positively to predicting Academic performance. Hence, based on the significant value of $P < 0.5$, the study accepts hypotheses 1 and 2 while rejecting hypotheses 3 and 4.

4.2 Independent Sample T-Test

Both the categories of the respondents; show a higher mean score on all the constructs of academic mindset. An independent samples t-test was used to see if the difference in mean scores was statistically significant. The assumption of homogeneity of variances was further examined and tested using Levene's F test. Except for SE (self-efficacy), the significance values for all other three constructs as reported in Table 5 were $P > 0.05$ revealing that the differences between respondents based on gender on those constructs of academic mindset were not statistically significant. SE (self-efficacy) on the other hand is statistically significant indicating there is a significant difference in mean between males and females on this construct of mindset with $t_{294.093} = 3.512, P < .001$.

4.3 Discussion

The purpose of this study was to examine the relationship between student's academic mindset (measured by a growth mindset, self-efficacy, the relevance of academic experience, and sense of

belonging) and their academic performance. It was hypothesized that 1) H1: There is a positive relationship between self-efficacy and academic performance 2) H2: A growth mindset is positively related to academic performance 3) H3: Relevancy of academic experience has a positive relationship with academic performance, and 4) H4: There is a positive relationship between a sense of belonging and academic performance. The first two hypotheses have been confirmed by the current study while disconfirming the latter two.

Specifically, the positive relationship between a growth mindset and academic performance has been proven, supporting prior research. As students move through the educational system, they are likely to encounter academic or social adversities, and those who see these adversities as something that they can overcome are more likely to be benefitted in terms of academic performance [26-27]. Dweck [9] further affirmed that individuals who believe that intelligence is increasable thereby holding a growth mindset

pursue the learning goal of increasing their competence and are hence positively associated with adaptive motivational patterns leading to positive academic performance. Along the same line, [10] also noted that a growth mindset leads to positive effort beliefs and learning goals and more positive strategies leading to improved grades. Further, as noted by Center for Community College Student Engagement [7] Individuals with a Growth Mindset believe that one's basic qualities are things that one can cultivate through one's efforts, strategies, and help from others. The positive relationship between a growth mindset and academic performance can also be drawn to how growth-minded individuals view mistakes/ failure. For instance, growth mindset people know they have to work, hence, they accept and view failure along the way as a challenge and a lesson rather than a reason to give up [9]. A growth mindset is associated with an adaptive response to mistakes whereby they learn from their mistakes and this has important implications for academic performance [11].

Table 2. Model summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .574 ^a | .329 | .320 | .625 |

a. predictors: (constant), ms, sob, rae, se

Table 3. Coefficient table

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .574 | .285 | | 2.012 | .045 |
| | SE | .370 | .075 | .328 | 4.911 | .000 |
| | RAE | .111 | .058 | .119 | 1.907 | .057 |
| | SOB | .051 | .078 | .039 | .654 | .514 |
| | MS | .287 | .079 | .203 | 3.636 | .000 |

a. dependent variable: ap

Table 4. Group Statistics

| | 1. Gender | N | Mean | Std. Deviation | Std. Error Mean |
|-----|-----------|-----|--------|----------------|-----------------|
| AP | Male | 169 | 3.59 | .740 | .057 |
| | Female | 145 | 3.45 | .773 | .064 |
| SE | Male | 169 | 3.72 | .631 | .049 |
| | Female | 145 | 3.45 | .693 | .058 |
| RAE | Male | 169 | 3.64 | .819 | .063 |
| | Female | 145 | 3.55 | .813 | .068 |
| SOB | Male | 169 | 3.89 | .541 | .042 |
| | Female | 145 | 3.80 | .615 | .051 |
| MS | Male | 169 | 3.6043 | .56162 | .04320 |
| | Female | 145 | 3.5431 | .50160 | .04166 |

Table 5. Independent samples test

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|-----|-----------------------------|---|------|------------------------------|---------|-------------------|--------------------|--------------------------|---|--------|
| | | F | Sig. | t | df | Sig. (2tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | Lower | | Upper |
| AP | Equal variances assumed | 1.064 | .303 | 1.705 | 312 | .089 | .146 | .085 | -.022 | .314 |
| | Equal variances not assumed | | | 1.699 | 300.289 | .090 | .146 | .086 | -.023 | .315 |
| SE | Equal variances assumed | 4.211 | .041 | 3.538 | 312 | .000 | .264 | .075 | .117 | .411 |
| | Equal variances not assumed | | | 3.512 | 294.093 | .001 | .264 | .075 | .116 | .412 |
| RAE | Equal variances assumed | .247 | .620 | .998 | 312 | .319 | .092 | .092 | -.090 | .274 |
| | Equal variances not assumed | | | .999 | 305.404 | .319 | .092 | .092 | -.089 | .274 |
| SOB | Equal variances assumed | .014 | .906 | 1.364 | 312 | .174 | .089 | .065 | -.039 | .217 |
| | Equal variances not assumed | | | 1.350 | 289.373 | .178 | .089 | .066 | -.041 | .219 |
| MS | Equal variances assumed | 1.038 | .309 | 1.011 | 312 | .313 | .06119 | .06053 | -.05792 | .18029 |
| | Equal variances not assumed | | | 1.020 | 311.486 | .309 | .06119 | .06001 | -.05690 | .17927 |

Self-efficacy is also confirmed to have a positive relationship with academic performance. Academic Self-efficacy is the confidence or perception about one's ability to carry out the academic task which is positively related to academic performance as per the result of this study. Bandura et al. [13] noted that children's belief in their self-efficacy is linked to scholastic achievement directly as these beliefs influence aspirations, the strength of goal commitment, level of motivation, perseverance, quality of analytic thinking, causal attribution for success and failure, vulnerability to stress and depression. Another explanation for the positive relationship between academic self-efficacy and academic achievement may be as noted by Cassidy [14], academic self-efficacy is positively related to academic resilience promoting positive academic performance. Han et al. [1] also reported a positive relationship between academic self-efficacy with academic performance, noting that academic self-efficacy leads to specific behaviors that can encourage academic performance. Students who have high academic self-efficacy view problems or setbacks in their academic course as a challenge that they can overcome and thus, are inspired to put more effort to succeed. Ansong et al. [15] noted that student's academic self-efficacy shapes their educational aspirations which further shape their academic achievement because when students are confident of their academic capabilities, they can set educational aspirations that drive them to academic excellence.

This study, however, couldn't establish the relationship between the student's sense of belonging and the relevance of academic experience with academic performance. This result contradicts the findings of prior research. For instance, [7] noted that when students are able to see the connection between their college work and their future employment or other life goals, more engaged they will be in their college experience and when students feel they are accepted part of the college community they are more likely to stay and complete their education. Along the same line, [16] reported that Students who are able to apply their learning in the workplace see the immediate benefit of their studies and may be more motivated to succeed in school, and also students' interaction with faculty members greatly influences their whole academic experience. [17], also concluded that faculty who establish a relationship with students encourage the students to participate and

engage in the classroom setting while when students feel excluded from their peers, it negatively affects their performance in the course and subsequently influences their degree completion.

The study also tried to understand the academic mindset from the gender perspective and the result concluded that males and females differ in terms of their academic mindset, especially on the self-efficacy construct whereby males are reported to have a higher self-efficacy than females. The result aligns with [15], who calls for intervention to meet the unique needs of boys and especially girls to create a learning environment that supports their feeling, creates a positive perception, and includes activities that encourage participation from all.

5. CONCLUSION

This study explored the relationship between the four constructs of academic mindset with academic performance using regression analysis. The result confirmed the impact of two constructs namely growth mindset and self-efficacy on academic performance. The study also attempted to examine the academic mindset from a gender perspective, and its findings indicated that there are differences between the academic mindsets of men and women, particularly with regard to the self-efficacy construct, where men are said to have a higher level of self-efficacy than women. Based on this finding, calls for intervention from academic institutions to help students develop a growth mindset and also improve the self-efficacy of the students to draw better academic results. Limitations and suggestions for future researchers.

Although this study has tried to understand the relationship between psychological factors i.e. academic mindset with academic performance, the constructs/ variables this study has identified and studied may not entirely predict academic performance. So, the researchers would like to recommend that future researchers interested in this field that in addition to the constructs studied in this research, also explore other psychological factors like motivation, resilience, grit etc.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image

generators have been used during writing or editing of manuscripts.

CONSENT

As per international standards or university standards, respondents' written consent has been collected and preserved by the author(s).

ACKNOWLEDGEMENTS

The authors are grateful to the Gedu College of Business Studies and the Royal University of Bhutan for their ongoing support and encouragement in developing the research capacities of young researchers. Thank you especially for the Gedu College students who have enthusiastically engaged in this study as respondents.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Han C, Farruggia SP, Moss TP. Effects of academic mindsets on college students' achievement and retention. *Journal of College Student Development*. 2017;58(8): 1119–1134. Available: <https://doi.org/10.1353/csd.2017.0089>
2. Gyeltshen K, Dorji R. Higher Education in Bhutan. *Handbook of Education Systems in South Asia*. 2020;1:28. Available: https://doi.org/10.1007/978-981-13-3309-5_58-1
3. Ayoola, Fagbenro W, Abdullahi Ibrahim. Students growth mindset: Potential asset in fostering educational equity. *Asian Journal of Education and Social Studies*. 2024;50 (6):523-33. Available: <https://doi.org/10.9734/ajess/2024/v50i61429>.
4. Yankyerah, Andrew Kwame, Kwame Bediako Asare, and Kennedy Nyeseh Ofori. Understanding truancy among senior high school students in the Offinso Municipality of Ghana. *Archives of Current Research International*. 2023;23 (7): 205-25. Available: <https://doi.org/10.9734/acri/2023/v23i7606>.
5. Zander L, Brouwer J, Jansen E, Crayen C, Hannover B. Academic self-efficacy, growth mindsets, and university students' integration in academic and social support networks. *Learning and Individual Differences*. 2018;62:98-107
6. Rinzin YC. MoE reviewing policy to enhance tertiary education. *Kuensel Online*; Kuensel Corporation; 2021. Available: <https://kuenselonline.com/moe-reviewing-policy-to-enhance-tertiary-education/>
7. Center for community college student engagement. (2019). A mind at work: Maximizing the relationship between mindset and student success. national report. In ERIC. Center for Community College Student Engagement; 2019. Available: <https://eric.ed.gov/?q=source%3A%22Center+for+Community+College+Student+Engagement%22&id=ED596238>
8. Dweck CS. *Mindset*. Robinson; 2017. (Original work published 2006)
9. Dweck CS, Leggett EL. A social-cognitive approach to motivation and personality. *Psychological Review*. 1988;95(2):256–273. Available: <https://doi.org/10.1037/0033-295x.95.2.256>
10. Blackwell LS, Trzesniewski KH, Dweck C. S. Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child Development*. 2007;78 (1):246–263. Available: <https://doi.org/10.1111/j.1467-8624.2007.00995.x>
11. Moser JS, Schroder HS, Heeter C, Moran TP, Lee YH. Mind your errors: Evidence for a neural mechanism linking growth mindset to adaptive post error adjustments. *Psychological Science*. 2011;22(12):1484–1489. Available: <https://doi.org/10.1177/0956797611419520>
12. Sheridan D, Carr M. Mens sana: An investigation into the relationship between psychological traits and academic success of first year engineering students. *IEEE Xplore*; 2018. Available: <https://doi.org/10.1109/CISPEE.2018.8593486>
13. Bandura A, Barbaranelli C, Caprara GV, Pastorelli C. Multifaceted Impact of self-efficacy beliefs on academic functioning. *Child Development*. 1996;67(3):1206. Available: <https://doi.org/10.2307/1131888>

14. Cassidy S. Resilience building in students: the role of academic self-efficacy. *Frontiers in Psychology*. 2015;6. Available:<https://doi.org/10.3389/fpsyg.2015.01781>
15. Ansong D, Eisensmith SR, Okumu M, Chowa GA. The importance of self-efficacy and educational aspirations for academic achievement in resource-limited countries: Evidence from Ghana. *Journal of Adolescence*. 2019;70:13–23. Available:<https://doi.org/10.1016/j.adolescence.2018.11.003>
16. Saenz T, Marcoulides GA, Junn E, Young R. The relationship between college experience and academic performance among minority students. *International Journal of Educational Management*. 1999;13(4):199–207. Available:<https://doi.org/10.1108/09513549910278124>
17. Booker K. Connection and commitment: how sense of belonging and classroom community influence degree persistence for African American undergraduate women. *International Journal of Teaching and Learning in Higher Education*. 2016;28(2):218–229. Available:<https://files.eric.ed.gov/fulltext/EJ1111140.pdf>
18. Jones BD, Krost K, Jones MW. (2021). Relationships between students' course perceptions, effort, and achievement in an online course. *Computers and Education Open*. 2021;2:100051. Available:<https://doi.org/10.1016/j.caeo.2021.100051>
19. Gall MD, Gall, JP, Borg WR, Mendel PC. A guide for preparing a thesis or dissertation proposal in education, for Gall, Gall, and Borg Educational research: An introduction eighth edition and applying educational research fifth edition. Pearson Education; 2007.
20. Royal University of Bhutan. (n.d.). Royal University of Bhutan - Information Management System |. *Ims.rub.edu.bt*. Accessed On:24, 2022, Available:<https://ims.rub.edu.bt/public/>
21. Yamane T. *Statistics*, 2nd ed. New York: Evanston & London, Harper & Row;1967.
22. Kothari R. *Research methodology: Methods and techniques*. New Delhi: New Age International; 2004.
23. Dweck CS. *Self-theories: Their Role in Motivation, Personality, and Development*. Psychology press; 1999.
24. [21] Dangi, H. K., & Dewen, S. (2016). *Business Research Methods (1st ed.)*. CENGAGE Learning.
25. Shi J, Mo X, Sun Z. [Content validity index in scale development]. *Zhong Nan Da Xue Xue Bao. Yi Xue Ban = Journal of Central South University. Medical Sciences*. 2012;37(2):152–155. Available:<https://doi.org/10.3969/j.issn.1672-7347.2012.02.007>
26. Barbouta AB, Barbouta C, Kotrotsiou S. Growth mindset and grit: How Do university students' mindsets and grit affect their academic achievement? – ProQuest; 2020. Available:Www.proquest.com. Available:<https://www.proquest.com/openview/6b32883c88727579cda1784de963e123/1.pdf?pq-origsite=gscholar&cbl=1606338#:~:text=It%20was%20hypothesized%20that%20a>
27. Antaramian S. The importance of very high life satisfaction for students' academic success. *Cogent Education*. 2017;4(1):1307622.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of the publisher and/or the editor(s). This publisher and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.

© Copyright (2024): Author(s). The licensee is the journal publisher. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:

<https://www.sdiarticle5.com/review-history/118695>