

Effects of Motivation to the Academic Performance of Senior High School Students in Northwestern Agusan Colleges in the A. Y. 2023-2024

Jonalene Ciara Mae L. Johare, Marlon John Hendrick B. Gonzales, Franklin Rivon S. Libarnes, Kent Eidrian E. Maceda, Vernz Angello B. Limbaga

Jonalene Ciara Mae L. Johare
Northwestern Agusan Colleges
Nasipit, Agusan del Norte
Caraga, Philippines

jojonaleneciaramae25@gmail.com
<https://orcid.org/0009-0001-3278-6525>

Marlon John Hendrick B. Gonzales
Northwestern Agusan Colleges
Nasipit, Agusan del Norte
Caraga, Philippines

gonzalesmarlon795@gmail.com
<https://orcid.org/0009-0003-4768-8439>

Franklin Rivon S. Libarnes
Northwestern Agusan Colleges
Nasipit, Agusan del Norte
Caraga, Philippines

franklinrivon72805@gmail.com
<https://orcid.org/0009-0004-5599-4310>

Kent Eidrian E. Maceda
Northwestern Agusan Colleges
Nasipit, Agusan del Norte
Caraga, Philippines

kenteidrianmaceda@gmail.com
<https://orcid.org/0009-0000-9056-1562>

Vernz Angello B. Limbaga
Northwestern Agusan Colleges
Nasipit, Agusan del Norte
Caraga, Philippines

vernzlimbaga1333@gmail.com
<https://orcid.org/0009-0001-2910-6576>

Abstract: *This study investigates motivation's multidimensional influence on academic achievement, stressing its critical role in molding students' learning outcomes. The abstract illustrates the interwoven relationship between numerous motivating elements and academic performance, based on a thorough analysis of available evidence. The contributions of key drivers such as internal and extrinsic motivation, goal-setting, self-efficacy, and the learning environment to students' engagement, persistence, and total accomplishment are investigated. The abstract also discusses potential obstacles and techniques for generating long-term motivation in educational environments. Understanding and harnessing the power of motivation emerges as a crucial component in improving academic achievement and fostering lifelong learners as education continues to evolve.*

Keywords— *Motivation, self-efficacy, Intrinsic, Extrinsic, grade motivation, self-assessment, career motivation*

1. INTRODUCTION

The internal and external forces that motivate people to participate, work hard, and achieve in their educational endeavors are referred to as motivation in academic performance. The level of effort, commitment, and tenacity that students demonstrate in their academic work is greatly influenced by their motivation. It is frequently

seen as a crucial indicator of success and progress in academics.

The inner aspirations, pursuits, and objectives that propel people to excel in the classroom are referred to as internal motivation. This could include a sincere desire to study, as well as curiosity and a hunger for information. On the other side, external motivation refers to the external rewards, incentives, and pressures that encourage people to perform well in school. This could

include accolades, grades, scholarships, parental or cultural expectations, and awards.

Academic achievement can be strongly impacted by motivation in a number of ways. First of all, motivated students are more likely to set high standards for themselves and work harder to meet these standards. They are more eager to take on challenging jobs, keep going after failures, and look for chances to develop and do better. Higher levels of involvement, focus, and productivity in their academic work result from this. Second, motivation has a favorable impact on students' attitudes and views about who they are as people and what they are capable of. Motivated people frequently have a growth mindset, which is the conviction that they can improve their abilities and intelligence through effort and experience. They are more likely to adopt successful learning techniques include setting reasonable learning objectives, time management that works, asking for assistance when necessary, and accepting obstacles. Higher self-efficacy and academic self-confidence are the results, which boost academic achievement.

However, a lack of motivation can compromise academic success. Unmotivated students may show indifference, disinterest, and a lack of effort in their academic pursuits. They might not feel as though their learning has direction, meaning, or genuine satisfaction. This may result in lower academic performance as well as frustration, boredom, and even dropout

Improving academic performance and achievement can be facilitated by establishing a friendly and stimulating learning environment, establishing reasonable goals, giving meaningful feedback, and encouraging intrinsic motivation.

Science Learning, Technology Learning Motivation, and Engineering Concern by Gender

The outcomes of comparing motivation for learning science and technology. The motivation for and issues with engineering between the sexes are presented. from Table 2. According to the table, male students had much higher science intrinsic motivation. motivation and personal relevance, science autonomy, and intrinsic technology Concern, self-determination in technology, and drive and personal relevance relating to engineering than pupils who are female. But there was no statistically significant There was a difference in the fear of science and technology among male students, female students as well.

Correlation Among Technology Learning Motivation, Science Learning Motivation, Engineering Concern Variables

To investigate the relationship between students' motivation for technology study and science, the Pearson link between engineering-related anxiety and learning motivation The coefficient method was applied. Table 3 displays each correlation's coefficient gender. The findings demonstrate that male students' worries about engineering had scientifically proven positive link between intrinsic desire for research and

self-determination in science, intrinsic motivation in technology, and while it had a tremendous impact on technological self-determination and personal relevance Technology and scientific anxiety are negatively correlated. These relationships also discovered among female students. Despite the fact that both male and female students demonstrated unfavorable connections between technological anxiety and some relationships among other variables in male students were not statistically significant.

Hierarchical Regression Analysis Results for the Variables of Science Learning Motivation and Technology Learning Motivation (MALE)

The model is statistically significant ($p .001$), according to Table 4. In taking into account the model's capacity for explanation, it was discovered that all independent ($R = 0.773$, $R^2 = 0.598$, $p .001$) variables account for 59.8% of the overall variation. a query pertaining to engineering. Accordingly, predictor variables were looked at with the variable's standardized regression coefficient (β), and it was discovered that technology's inherent characteristics were the key indicator of worries about engineering. Following this variable were the variables for intrinsic science and science-based decision. Engineering-related anxiety was not a major issue. determined by technological prediction. When technology levels are intrinsic, the level of worry related to science's inherent and scientific determination increased likewise, engineering increased.

Hierarchical Regression Analysis Results for the Variables of Science Learning Motivation and Technology Learning Motivation (FEMALE)

The model is statistically significant ($p .001$), according to Table 5. As an example all independent variables were determined to be independent of the model's capacity for explanation. explain 44.0% of the overall variation for concern-related variables ($R = .663$, $R^2 = .440$, $p .001$) that of engineering. The standardized test was used to assess predictor variables. the variable's regression coefficient, and it was found that technology intrinsic were the most significant predictor of engineering-related anxiety. This element the scientific variables came next. The issue with engineering was not Technology determination and scientific determination greatly predicted. When The levels of intrinsic science and technology have risen, as has the level of concern raised and vice versa in relation to engineering.

2. METHODOLOGY

2.1 Research Questions

1. How does motivation affects the students towards their academic performances?
2. What are the effects of motivation in doing their lessons and examinations.
3. When can the students identify or feel being motivated in learning.

4. Where do students obtain the drive to complete their schoolwork?

2.2 Research Design

In order to acquire accurate data about the impacts of motivation on academic achievement, this study adopted the quantitative approach. It is quantitative since the main goal of the study is to ascertain how Northwestern Agusan Colleges students' motivation affects their academic performances in academic year 2023–2024.

2.3 Research Locale

The location of this study, Northwestern Agusan Colleges, was chosen to better understand the location of this study, Northwestern Agusan Colleges, was chosen to better understand how student’s motivations influences how well they complete their schoolwork. These studies looked at how well students were motivated to work hard during their classes and exams. The effectiveness for Northwestern Agusan Colleges student is determined in part by the researchers.

2.4 Participants of The Study

This study was conducted on October 16-25 2023 at Northwestern Agusan Colleges. The participants are from Senior High School students regardless of gender.

Grade Level	Population
11	78
12	100

2.5 Data Gathering Procedure

A couple sets of questions were supplied by the researchers, which we will utilize to interviewing our respondents before applying a quantitative technique to compile the information we have gathered from the responses. The one that researchers calculated that there were 90 male responders and 88 female respondents number of male participants in our study who were Senior High School students.

2.6 Statistical Tool

Frequency- This will give an overview of the population's age, gender, and grade level distribution.

Mean- An average computed by giving different weighs to come of the individual values.

Cronbach’s Alpha- a way of assessing reliability by comparing the amount of shared variance or covariance.

Science Learning Motivation and Technology Learning Motivation scales. In this present study to measure the science learning motivation and technology

learning motivation, Glynn et al.’s (2009) test instrument, the science motivation questionnaire (SMQ) was utilized. Glynn et al.’s (2009) test instrument is based on the social cognitive theory to measure and assess people’s motivation.

Statements	Never	Rarely	Sometimes	Often	Always
01. The topic that I learn is relevant to my life.					
02. I like to do better than other students on all tests.					
03. Learning is more interesting with motivation.					
04. Getting a good grades in all subjects is important to me					
05. I put enough effort into learning in every subjects.					
06. I use strategies to learn the lessons well.					
07. Learning with motivation help me get a good job.					
08. It is important that I get an "A" in all subjects.					

09. I am confident I will do well on every tests.							in all subjects.					
10. Knowing all the topics will give me a career advantage.							18. I believe I can earn a grade of "A" in all subjects.					
11. I spend a lot of time learning in each topics.							19. I enjoy learning every subjects.					
12. Learning each and every subjects makes my life more meaningful.							20. I think about the grade I will get in each topic.					
13. Understanding every topics will benefit me in my career.							21. I am sure I can understand every subjects.					
14. I am confident I will do well on every tests and projects.							22. I study hard to learn every topic.					
15. I believe I can master all the subjects with knowledge and skills.							23. My career will involve with motivation.					
16. I prepare well for the examinations.							24. Scoring high on every tests really matters to me.					
17. I am curious about discoveries							25. I will use my knowledge on problem-solving skills in my career.					

3. RESULTS AND DISCUSSION

The results of this study will contribute to the body of knowledge already available on student motivation in relation to academic achievement. It will provide insightful information about the factors that significantly affect students' happiness, enabling educators and decision-makers to make data-driven choices that will enhance the whole student experience.

Table 1

<i>Instruments for the Original Study (Glenn et al.,2009) and the Present Study</i>		
<i>Present Study</i>		
<i>Indicator</i>	<i>#items</i>	<i>Cronbach's α</i>
<i>Intrinsic motivation and Personal relevance</i>	6	0.7

Table 1 shows that students in senior high school are significantly impacted by intrinsic motivation and personal relevance, both of which were awarded a satisfactory rating in the overall results.

Intrinsic motivation is an inner force that motivates students to engage in academic activities, because they are interested in learning and they enjoy the learning process as well (Schiefele, 2018) (Harter, 2018) explained that intrinsic motivation is the true drive in human nature, which drives individuals to search for and to face new challenges. Their abilities are put to the test and they are eager to learn even when there are no external rewards to be won. Students with learning goals of seeking understanding for mastery of science content and skills are said to be intrinsically motivated (Rozman et al., 2018). Stated that intrinsically motivated individuals possess the following characteristics: They engage in both mental and physical activities holistically, they remain highly focused throughout these activities with clearly defined goals, they are self-critical, they self-reflect on their own actions realistically, and they are usually relaxed and not afraid to fail during learning. A research study done by (Stipek, 2018) concluded that intrinsically motivated students learn independently and always choose to do challenging tasks. They persevere to complete the tasks they have undertaken. They integrate the knowledge acquired in school with their experiences gained from outside school. They often ask questions to broaden their knowledge and learn regardless of any external push factors or help from teachers, and they take pride in their work and express positive emotions during the learning process. Highly intrinsically motivated students are able to learn new concepts successfully and show better understanding of the subject matter (Stipek, 2018)

Table 2

Instruments for the Original Study (Glenn et al.,2009) and the Present Study

<i>Present Study</i>		
<i>Indicator</i>	<i>#items</i>	<i>Cronbach's α</i>
<i>Self Motivation</i>	6	0.7

Table 2 demonstrates the significant influence that self-motivation has on Senior high school students' academic achievement.

Learner-centered teaching involves cooperation between students by dividing them into small groups during educational activities, which gives them a chance to discuss their expectations, interpretations, procedures and the data they get with the help of their peers before finishing the activity. Learning within cooperative groups deeply affects the whole personality of learners: cognitively, emotionally and socially (Zaytoun et al., 2019) (Conwell et al., 2019) concluded that cooperative learning had led to developing students' perceptions and increasing their level of self-esteem, academic achievement and feelings. Moreover, the study of (McCurdy, 2019) showed the positive effect of cooperative learning on developing academic self-motivation among learners in addition to increasing their participation in classroom activities and educational assignments. In fact, attitude is one aspect of social motives acquired during socialization (AlTaweel, 2019) It affects one's qualitative motives and directs their behavior being an acquired general tendency that is relatively approved but emotionally acquired. Additionally, academic motivation is related to different teaching strategies and methods that are utilized in the educational process such as active learning (Komarraju et al., 2019) Some studies showed that there was statistically positive significant relation between internal motivation and all of the following: employing effective learning strategies,

<i>Present Study</i>		
<i>Indicator</i>	<i>#items</i>	<i>Cronbach's α</i>
<i>Grade Motivation</i>	4	0.6

positive attitudes towards the school and selecting difficult tasks.

Table 3

Instruments for the Original Study (Glenn et al.,2009) and the Present Study

Table 3's grade motivation data reveals that, due to a lack of motivation, only a small percentage of senior high school students are still focusing on improving their academic performance.

Changes and developments in technology are also effective in shaping educational environments. When the studies aiming to reveal the results of the use of AR technologies in educational environments are examined, it is seen that this technology gives positive results as it "increases students' success, makes learning fun, increases motivation, makes abstract concepts concrete, increases cooperation, can be used in teaching experiments that can be dangerous or small objects that are difficult to observe in the classroom, it allows the students to learn at his/her own pace and reduces misconceptions" (Chen et al., 2022) (Övez et al., 2022) In this century, which can be called the digital century, the roles of teachers and students are changing by gaining different dimensions 21st century children are born in an environment where technology is frequently used in every field in a world woven with virtual networks surrounding them. For this generation, called digital natives, not to get lost in the endless information stack on the internet, it is necessary to direct their efforts on how to use technology, reach accurate and reliable information and integrate the information they have learned into their daily life.

Table 4

Instruments for the Original Study (Glenn et al., 2009) and the Present Study

<i>Indicator</i>	<i>Present Study</i>	
	<i>#items</i>	<i>Cronbach's α</i>
<i>Self efficacy and Assessment and anxiety</i>	6	0.6

Table 4 Self-Efficacy and Assessment Anxiety shows that senior high school students become less interested in their academic achievements as a result of a loss of drive.

Different studies about happiness and other variables have been conducted. It is seen that variables such as gender, religion, marital status, education, and health affect happiness significantly. On the other hand, an increase in the income level brings temporary happiness but individuals return to their previous states after they adjust to it (GökdemirDumludağ, 2023) Intelligent people receive better education, earn more money and are more apt at leadership. Intelligence contributes to labor productivity but does not enable people to be happier and more satisfied with their jobs (Robbins et al., 2023) Studies on job satisfaction suggest that job satisfaction depends mostly on genetic structure. Whether a person is happy or not can be determined by the gene structure, that is, the level of happiness and the state of being happy are directed by the genes (Arvey et al., 2023) According to another study, men are happier than women and married individuals are happier than single ones. It was

observed that students and pensioners are generally happy, and that individuals "between ages 18-24" and "65 and above" have higher levels of happiness (Şentürk, 2023) According to a similar study, high income is related to high level of happiness; happiness is at the highest levels among women, married people, and people with high educational status and people whose parents aren't divorced. Jobless people and people who have married twice had lower happiness levels. Happiness is like the letter "U" with regards to age and is at its lowest level during the forties (Blanchflower et al., 2023)

Table 5

Instruments for the Original Study (Glenn et al., 2009) and the Present Study

<i>Indicator</i>	<i>Present Study</i>	
	<i>#items</i>	<i>Cronbach's α</i>
<i>Career Motivation</i>	5	0.8

Table 5 illustrates how senior high school students who are motivated about their careers perform well academically in terms of their careers.

Learning theorists acknowledge the positive effects of students' interest in, wishes about learning on their success in learning process. The variables that enable students to engage in learning with interest and enthusiasm could be explained by two concepts called "learning motivation" and "academic motivation" (Anderman et al., 2021) Academic motivation is defined by a student's desire (as reflected in approach, persistence, and level of interest) regarding academic subjects when the student's competence is judged against a standard of performance or excellence (McClelland et al., 2021) Academic motivation is a broad term incorporating many concepts studied by scholars to include self-efficacy, determination, resilience, etc. (Alharthi et al., 2021)

4. CONCLUSION

Therefore, the researchers draw the following conclusion based on the data collected, interpretation, and analysis:

1. Table 1 shows how senior high school students' academic performance is greatly impacted by their intrinsic drive and sense of personal significance.
2. Table 2 demonstrates how senior high school students ability to make their own decisions greatly affects their academic achievement.

3. Table 3 indicates how senior high school students' grade motivation influences their level of eagerness in their academic work.

4. Table 4 presents the significant influence that students' self-efficacy has on their academic performance in senior high school.

5. Table 5 illustrates how senior high school students' ambition for careers encourages them to take a greater interest in their academic achievements.

5. RECOMMENDATION

The researchers' recommendations are as follows, based on their findings and conclusions:

1. This study suggests that providing students with inspiration and motivation will help them become more engaged in their academic work.

2. This study suggests to show some relevance to students academic lives by showing off their passion when it comes to academic performances.

3. Students must have that motivation for them to show how enthusiasm they are when it comes to their academic performances.

4. This study suggests to encourage students to have a strong passion and enthusiasm for their work, roles, or subjects, or to work toward a goal.

5. This study suggests to promote growth mindset to the students with motivation and develop knowledge for their academic performances.

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