

# MOTIVATIONAL STRATEGIES AND SELF-REGULATED LEARNING IN PRINTED MODULAR DISTANCE LEARNING MODE

# JENEFER M. AGBOT

Abstract. The study determined the relationship between motivation strategies and selfregulated learning, motivation strategies and academic performance, and self-regulated learning and academic performance. The study's respondents were the students in the selected schools in CARAGA Davao Oriental division. There were 5 schools selected in this study, each with 50 selected students to participate. Hence, a total of 250 students would participate through random sampling. The finding revealed that the extent of motivation strategies in terms of Intrinsic Motivation, Extrinsic Motivation, and Self-Efficacy in Learning suggests that motivation strategies were pervasive and interpreted as always manifested. The overall mean rating of 4.30 with the descriptive rating of very extensive denotes the pervasive motivation strategies of learners in Caraga Davao Oriental. The extent of self-regulation regarding Metacognition Strategies and environmental Structuring was moderately extensive, academic improvement was moderately extensive, and Computer Self-Efficacy was moderately extensive. The overall mean rating denoted moderately extensive self-regulation due to some factors, such as distraction or parental support of their learners. The Academic Performance of Students was very extensive. There was a significant relationship between motivation strategies and selfregulated learning. There was a significant relationship between the motivation strategies and academic performance. There was a substantial relationship between self-regulated learning and academic performance. The study highly recommended that Educators or teachers try to adopt student-centered classroom activities and encourage students to self-regulate their learning processes.

## **KEY WORDS**

1. Motivation. 2. Strategies. 3. Self-regulated learning.

# 1. Introduction

Students motivated to reach a specific goal would engage in self-regulatory activities to help them achieve it. Self-regulation promotes learning, which leads to a perception of greater competence, which sustains motivation toward the goal and future goals. When these two variables were in printed modular distance learning mode, they could learn on their schedule within a certain time frame. It could access and complete lectures, readings, homework, and other learning materials anytime during one or two weeks. Communication happens when information can be exchanged independently of time. It does not require the recipient's immediate attention, allowing them to respond to the message at their convenience. On a global scale, 87 percent of the world's student population was affected during lockdowns and quarantines, and 1.52 billion learners were out of school and related educational institutions (UNESCO Learning Portal, 2020). The suddenness, uncertainty, and volatility of COVID-19 left the education system in a rush to address the changing learning landscape. Due to the world health crisis, one emerging reality is migrating to online learning modalities to mitigate the risk of face-to-face interaction. Universities are forced to migrate from faceto-face delivery to online modality due to the pandemic. Thus, the government, together with the Commission on Higher Education (CHED) during Coronavirus (COVID-19), Printed Modular Distance Learning Mode. During the integration of face-to-face and online instruction learning, which is widely adopted across higher education, with some scholars referring to it as the "new traditional model" (Ross Gage 2006), online, distance, modular, and flexible learning resulted. Students' motivation influenced both its advantages and disadvantages As a result, education for affected countries globally enhances planning, establishing objectives, applying learning strategies, self-monitoring, reflecting, and maintaining adaptive motivating beliefs, which are all part of the process of adapting to the sudden changes resulted by the pandemic, which will undeniably cause problems. In Indonesia, specifically Indonesian Universities reported that some students in higher education during the coronavirus outbreak contributed inconsistent effects to the student's motivation regarding online learning. Some students lack motivation, and some were highly motivated by online learning. A study by Cahyani, Listiana, and Larasati (2020), Rachmat (2020), and Simamora (2020) reported that students who lack motivation were significantly affected by external factors like learning environment, learning time, and instrumental supports, which in

turn affected the achievement. It was argued that motivated learners could do challenging learning activities that actively engage them in finding appropriate strategies to facilitate their learning, enjoying them and indicating better persistence and creative learning. (Ryan Deci, 2000a, 2000). In the Philippines, reported statistics show that the pandemic roughly affects almost 3.5 million Filipino students enrolled in tertiary-level institutions. (Joaquin et al., 2020) Some students are also challenged by the need to overcome the crisis in a face-to-face learning setup; students now even have to face difficulties associated with remote learning (Simbulan, 2020). These scenarios resulted in students suffering from a lot of stressful events due to the many responsibilities they have to handle every day. Given by situation is the fact that, according to Alvarez (2020) not every student can provide and adapt to the rapid advances of technology in today's digital age, especially in developing countries like the Philippines, in which education is plagued by problems even before the pandemic which complicates more the learning of the students. A certain study also explored the challenges and issues in teaching and learning continuity of public higher education in the Philippines as a result of the COVID-19 pandemic. This study employed the exploratory mixed-method triangulation design and analyzed the data gathered from 3,989 respondents composed of students and faculty members. It was found that during school lockdowns, the teachers made adjustments in teaching and learning designs guided by the policies implemented by the institution. Most of the students had difficulty complying with the learning activities and requirements due to limited or no internet connectivity. Most Universities in the Philippines including some schools in Davao region have resorted to asynchronous learning during school lockdowns. However, this sudden shift has resulted in problems especially for learners without access to technology. The

asynchronous modality is used the gap between those who have connectivity and those students without widened. The continuing academic engagement has been a challenge for teachers and students due to access and internet connectivity. Considering the limitation on connectivity, the concept of flexible learning emerged as an option for asynchronous mode especially in higher institutions in the Philippines. It must be highlighted that flexible learning focuses on giving students choice in the pace, place, and mode of students' learning which can be promoted through appropriate pedagogical practice (Gordon, 2014). According to the findings of several studies, learning strategies contribute to improving students' performance (Nasihah Cahyono, 2017). Self-efficacy, motivation, and learning strategies enhance students' performance. The essential premise of this methodology is that students learn to close the gap between their current status and their anticipated future self (Isatayeva et al., 2018). Such performance encourages students to believe in their abilities and self-efficacy and be more academically motivated. In the Philippines, printed modular distance learning modality was implemented to continue delivering quality and relevant education amid the pandemic. Modular Distance Learning is implemented for those living in rural areas or provinces where internet connection is only available for a few. The use of modules created by teachers to perform various tasks and learning activities based on fundamental

learning abilities is known as modular distance learning. According to the findings of several studies, learning strategies contribute to improving students' performance (Nasihah Cahyono, 2017). Self-efficacy, motivation, and learning strategies enhance students' performance. The essential premise of this methodology is that students learn to close the gap between their current status and their anticipated future self (Isatayeva et al., 2018). Such performance encourages students to believe in their abilities and self-efficacy and be more academically motivated. However, the researchers realized that further research was required, which focused not only on the effectiveness of printed modular learning during this pandemic but also on gathering data on how Caraga North District students, as respondents of the study, perceive mainly their experience of their motivational beliefs as driving force which self-regulated learning strategies is to use and foster in order to achieve successful academic performance in times of dealing with the new normal of teaching and learning. As a result, the researcher sensed an urgency to conduct and pursue this study as the researcher also believed that the success of the new normal process leads to this present study to investigate how motivation strategies and selfregulated learning strategies influence students' academic performance on a printed modular learning, flexible learning, asynchronous and synchronous classes or with what we called new standard of the educational system.

## 2. Methodology

This chapter presents the purpose and method used to conduct the study. It describes the research design, research environment, respondents and sampling method, research instrument, data gathering procedures, data analysis, and ethical considerations.

2.1. Research Design—The study applied a quantitative research design. A quantitative correlational research design was used in the study to determine the relationship between motivation strategies and self-regulated learning among students. Correlational studies looked at the relationship between more than two variables. Correlational Study for Raulin, Graziano (2000) believed that a correlational study has two essential functions to perform in any given study. Each outcome from a consistent relationship can be used to predict future events The study used a non-experimental descriptivecorrelational research design. This refers to a type of design that lacks manipulation of an independent variable. Pallant (2005) describes a relationship between two or more variables without any interference from the researcher; rather than manipulating an independent variable, researchers conducting non-experimental research measure variables as they naturally occur. For Alarcón (2009), the research design is correlational to the extent that the outcomes obtained from variable measurement have been analyzed to determine the extent and direction of the relationship between the study variables (Hernández et al., 2010).

2.2. Research Respondents—The study's respondents were the students in the selected schools in CARAGA Davao Oriental division. There were 5 schools selected in this study, each with 50 selected students to participate. Hence, a total of 250 students would participate through random sampling. Random sampling was used to select the schools in the Davao Oriental Division. Random sampling was used to select the study participants, and applying stratified random sampling techniques would involve several steps in selecting secondary school teachers, where the three schools were the strata. The first step was identifying the strata, the five elementary schools in CARAGA district. Once the strata were identified, the population of secondary school teachers is divided into three groups, each corresponding to one of the selected schools. The next step was to determine the sample size for each stratum. This can be done proportionally based on the size of the teacher population in each school or using a predetermined ratio. Within each school, a random sample of teachers was selected. This can be done using various randomization techniques, such as random number generators or random selection from a list of teachers. According to Thomas (2020), random sampling is a subset of a population chosen randomly in an essential random sampling. Each person in the population has an exactly equal probability of getting chosen using this sampling technique. This technique was the easiest to understand among all the probability sampling techniques because it only needs one random selection and little prior population knowledge. Because randomization was used, any research conducted with this sample should have high internal and external validity and be less likely to be biased by factors like sampling bias and selection bias. This one was the easiest to understand among all the probability sampling techniques because it only needed one random selection and little prior population knowledge. Any research conducted with this sample should have high internal and external validity and be less likely to be biased by factors like sampling and selection bias because randomization is used. According to Riaz et al. (2022), stratified random sampling is a sampling technique where the population is divided into subgroups, or strata, based on specific characteristics relevant to the research. Random samples are then independently selected from each stratum. This method ensures that each subgroup is represented proportionally in the sample, leading to a more representative and accurate sample overall. Once the samples were selected from each stratum, they were combined to form the study's final sample of elementary school grade six learners. The researcher implemented inclusion criteria when selecting the respondents. The inclusion criteria were currently enrolled, and grade six learners were willing to participate. This diversity enhanced the validity and generalizability of the study findings, allowing for a more nuanced understanding of how these practices impacted learners in Caraga District in different contexts. Additionally, ensuring voluntary participation and obtaining informed

consent upheld ethical standards in research conduct and protected the rights and privacy of the respondents. (2005); Ratten (2013), (Vonderwell et al. (2007); Ophus Abbitt (2009); Shea Bidjerano

2.3. Research Instrument—The study utilized the Motivated Strategies for Learning Questionnaire (MSLQ). This multi-measure assessment tool measures the constructs discussed above but uses different labels to describe some of these constructs. Specifically, intrinsic, extrinsic, and self-efficacy. As for the self-regulated learning questionnaire and academic performance, the researcher would adopt

the questionnaire on the following: Zhang et al. (2005); Ratten (2013), (Vonderwell et al. (2007); Ophus Abbitt (2009); Shea Bidjerano (2010). The study employed three parts of the questionnaire. The first part focuses on the Motivation strategies. In answering the questionnaire, the respondents made use of the 5-Likert scale. As a guide in determining the extent of the motivation strategies, the researcher made use of the range of means, descriptions, and interpretations as presented below:

Range of Mean and Descriptive Levels for Motivation Strategies

Range of Mean	Descriptive Level	Interpretation
4.20 - 5.00	Very Extensive	The motivation strategies are always observed.
3.40 - 4.19	Extensive	The motivation strategies are oftentimes observed.
2.60 - 3.39	Moderately Exten- sive	The motivation strategies are sometimes observed.
1.80 - 2.59	Less Extensive	The motivation strategies are seldom observed.
1.00 – 1.79	Not Extensive	The motivation strategies are never observed.

The second part focuses on Self-regulated made use of the range of means, descriptions, learning; in determining the extent of the students' self-regulated learning, the researcher

Range of Mean and Descriptive Levels for Self-Regulated Learning

Range Mean	of	Descriptive Level	Interpretation
4.20 - 5.00		Very Extensive	The self-regulated learning of the students is al- ways manifested.
3.40 - 4.19		Extensive	The self-regulated learning of the students is often manifested.
2.60 - 3.39		Moderately Exten- sive	The self-regulated learning of the students is some- times manifested.
1.80 - 2.59		Less Extensive	The self-regulated learning of the students is sel- dom manifested.
1.00 – 1.79		Not Extensive	The self-regulated learning of the students is never manifested.

www.nijse.net

Lastly, the third part of the questionnaire dent's academic performance, the researcher was about the student's academic performance. used a range of means, descriptions and inter-As a guide in determining the extent of the stupretations as presented below:

Range of Mean	Descriptive Level	Interpretation
4.20 - 5.00	Very Extensive	The student's academic performance is always evi- dent.
3.40 - 4.19	Extensive	The student's academic performance is oftentimes evident.
2.60 - 3.39	Moderately Exten- sive	The student's academic performance is sometimes evident.
1.80 – 2.59	Less Extensive	The student's academic performance is seldom evident.
1.00 – 1.79	Not Extensive	The student's academic performance is never evident.

Range of Mean and Descriptive Levels for Academic Performance

2.4. Data Gathering Procedure—The researcher undertook the steps in conducting the study after validating the research questionnaire. Permission to Conduct the Study. The researcher secured the permission to conduct the study. The researcher secured the endorsement from the Dean of the Graduate School in College where the researcher is studying. The endorsement letter from the Dean of the Graduate School in College where the researcher is studying, was attached to the permission letters to be endorsed to the Schools Division Superintendent and then to the school principals of the selected schools in CARAGA North District, Davao Oriental Division Distribution and Retrieval of the Questionnaire. After the approval to conduct the study, the researcher distributed the research instrument to the respondents. Upon distributing the questionnaires, the benefits of the survey were briefly discussed

and explained to the identified respondents. The study was conducted to administer the questionnaire in the fourth quarter of the school year 2022-2023. Moreover, the study respondents were given enough testing time to finish the questionnaires. After this, the data collected were subjected to quantitative analysis. Collation and Statistical Treatment of Data. After the questionnaire was retrieved, each respondent's scores were tallied to organize the data per indicator. Each score was then subjected to descriptive and inferential analysis using SPSS. Lastly, the researcher synthesized quantitative and qualitative findings, weaving together both data sets to develop a comprehensive narrative addressing the research objectives. They interpreted the findings in light of existing literature and theoretical frameworks, drawing meaningful conclusions about learners' authentic performance in the learning process.

2.5. Data Analysis—

lized by the researcher in processing the gathered data: The data gathered for this study was summarized, analyzed, and interpreted using the following statistical tools. Mean and Stan-

The following were the statistical tools uti- dard deviation. This was used to analyze the levels of motivation strategies and self-regulated learning. Pearson r- Correlation. To identify the relationship between the variables.

#### 3. **Results and Discussion**

This chapter presents, analyzes, and interprets data gathered in tabular and textual form to provide clear ideas and information on the queries based on the problem statement. Various reviews present implications of the results to corroborate and argue the hypothesis and theory as claimed and posed in the study.

gies of The Students

tent of the motivation strategies of the students. The result is focused on the highest and lowest mean ratings of indicators, which are as follows: Self-Efficacy in Learning (4.32), Intrinsic Motivation (4.31), and Extrinsic Motivation (4.28),

Summary of the Extent of Motivation Strate- suggest that the extent of implementation of school-based feeding program is always mani-Table 1 presents the Summary of the ex- fested. The overall mean rating of 4.31 denotes a very extensive summary of the extent of the motivation strategies of the students in Caraga Davao Oriental schools. This will suggest that the Motivation Strategies of the Students are always observed.

No	Indicators	Mean	Descriptive Equivalent
1	Intrinsic Motivation	4.31	Very Extensive
2	Extrinsic Motivation	4.28	Very Extensive
3	Self-Efficacy in Learning	4.32	Very Extensive
	Overall Mean	4.31	Very Extensive

Table 1. Summary of the Extent of The Motivation Strategies of The Students

This finding is similar to the idea of Shahsooni (2017), is a factor in the insistence on work and continuity of activity. Motivation is goal-centered and leads learners to complete their work and estimate the comprehension of an objective goal. Motivation is selective. It determines what action to take. Motivation determines the priority. It is a model for learner behavior, organizes the activities, adds to the workforce and efficiency, and leads to mapping or designing. The effects of the four factors of persistence, orientation, prioritization, and

planned behavior are necessary for learning Grossman (2016). They create a rich source to benefit the instructors, teachers, and learners. No one will remember anything without motivation, although genetics and environment or intelligence, an enriched teaching environment, and improving teaching methods have effects, to a large extent, on improving the educational situation. The heart of education is motivation. Many motivational processes are considered sensitive to features of the task, the classroom, or the context within which a student is engaged. For example, self-efficacy is task-specific (Bandura, 1986; Schunk, 1989, 1991) and a vital process involved in general self-regulation (Schunk, 1994). In this model, students are thought to generate efficacy judgments for specific classroom tasks, and it is assumed that these beliefs will vary depending on the function of the task or classroom features (Pintrich Schunk, 1996). Task value is usually conceptualized as individual personal characteristics in expectancy-value models of motivation (Wigfield, 1994). At the same time, these

Summary of The Extent of the Students' Self-Regulated Learning

Table 2 summarizes the Extent of the Students' Self-Regulated learning. It contains three indicators arranged randomly and shows that the overall mean is (3.00), which has the descrip-

models assume that individuals will find different domains, such as mathematics vs. English, as more or less personally attractive or valued (Wigfield, 1994; Wigfield Eccles, 1992, 1994). Accordingly, the level of task value should differ as a function of the domain. Anxiety is also viewed as an individual difference variable that may vary by domain, with some individuals having more anxiety for a particular domain, such as mathematics. In sum, the levels of each of these motivational components are assumed to depend on features of the task or domain

tive equivalent of moderately extensive. The four indicators are presented with their corresponding mean ratings: Metacognition Strategies (3.03), Environmental Structuring (3.02), Social Dimension (3.02) and Computer Self-Efficacy (2.93).

Indicator	Mean	Descriptive Equivalent
Metacognition Strategies	3.03	Moderately Extensive
Environmental Structuring	3.02	Moderately Extensive
Social Dimension	3.02	Moderately Extensive
Computer Self-Efficacy	2.93	Moderately Extensive
Overall Mean	3.00	Moderately Extensive

Table 2. Summary of The Extent of the Students' Self-Regulated Learning

man,(2011) posited that Self-regulated learning is a comprehensive framework for understanding how students become active agents of their learning process. From a broad aspect, Self-regulated learning can be defined as "selfgenerated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals". Students are described as self-regulated to the degree that they know and use a variety of learning strategies and decide when, why, and how to use these strategies in appropriate contexts (Zimmerman, 2005). Hea added that Successful Self-regulated

This finding is similar to the idea of Zimmer- learning includes constant active engagement, adjustment, and readjustment of learning strategies, and they depend on various factors. Zimmerman, one of the most eminent researchers of SRL, defines self-regulation as "self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal goals" (Zimmerman, 2000). Bandura (1986) states that SRL represents interrelatedness between the personal, behavioral, and environmental triadic processes. Students ' use of self-regulated learning strategies allows them to increase their personal control over their environments. Self-regulated learning provides a

sense of self-competence and may explain the include organization and transformation, data student's connection to motivation and achievement. Self-regulated learning processes enrich motivation and predict outstanding academic and athletic achievement (Zimmerman Kitsantas, 2005). Self-regulated learning strategies

The Extent of Academic Performance Of Students

Table 3 shows students' academic performance during the printed mode of learning. Questions regarding the student's academic performance are interpreted as moderately extensive. The presentation of the result focuses on the indicators with the rating of highest to least of the following: My grades are better when I use online resources (4.00), and I have a better exam pass rate when I use online resources

research, record keeping, self-observation, environmental structuring, self-effectuating, repeating, memory, surveying, and social aid (Zimmerman, 2011).

(2.76) as the lowest among the items. This has gained an overall mean of 4.22, with the descriptive equivalent being very extensive, with the descriptive equivalent sometimes observed. This means that the students with academic performance during this period of the printed mode were utilized. It seems that the parents of these participants were able to support them well, which may result in pervasive support by the parents in academic engagement.

Statements	Mean	Descriptive Equivalent
My grades are better when I use online resources.	4.81	Very Extensi
I have a better exam pass rate when I use online re-	3.50	Extensive
sources.		

Table 3. Acad	lemic Perf	formance of	f Students
---------------	------------	-------------	------------

tages such as sustainability, flexibility in learning paths, and improved time flexibility for learners. It also includes combining necessary components of education, allowing the application of knowledge and skills, and adapting to market conditions and social order. Modules permit instructors to organize content to assist control the flow of the course. Modules are utilized to organize course content by weeks, units, or a diverse organizational structure. Modules

**Overall Academic Performance** 

My individual work at university is better after I learn

My group work at the elementary level is better after I

The modular learning mode offers advan- basically make a one-directional direct flow of what students ought to do in a course. Each module can contain records, discussions, assignments, tests, and other learning materials. Modules can be included in the course from existing content or modern content shells inside the modules. Course content can be included in different modules or iterated several times throughout a person's module (Anthony, 2015).

> Significant Relationship Between Motivation Strategies and Self-Regulated Learning of

online.

learned online

ve

Extensive

Very Extensive

Very Extensive

4.06

4.50

4.22

Students

generated a significant correlation between mo- for the results provided empirical evidence of tivation strategies and self-regulated learning of significant results. Implementing motivation students (r=0.894; p<.010) and learners' nutri- strategies and self-regulated learning of students tional outcomes. Table 4 revealed the results of is crucial during the pandemic and other possithe significant relationship between the extent ble similar problems of ensuring that learners in of implementation of the Motivation Strategies the Philippines have access to education. These and Self-Regulated Learning of Students. It programs aim to address the issue of malnuprovides information that the posed null hypoth- trition, which is prevalent among learners in esis stating that there is no significant relation

ship between the motivation strategies and self-It can be depicted that Pearson's Correlation regulated learning of students must be rejected low-income families.

Table 4. Motivation Strategies and Self-Regulated Learning of Students Correlations

Self-Regulated Learning	P-value	Pearson R value	Decision	Interpretation
Variables				
Metacognition Strategies	.000	.736	Significant	Reject Null Hypothesis
Environmental Structuring	.000	.693	Significant	Reject Null Hypothesis
Social Dimension	.000	.878	Significant	Reject Null Hypothesis
Computer Self-Efficacy	.000	.901	Significant	Reject Null Hypothesis
Overall Self-Regulated	.000	.894	Significant	Reject Null Hypothesis
Learning				

tween motivation strategies and students' self- regulated learning rejects the null hypothesis regulated learning. Table 4 shows the motivation strategies and self-regulated learning of students' correlation; all the self-regulated learning indicators showed a positive correlation. Metacognition strategies had a .000 p-value and an R-value of .736, which showed a significant relationship. Environment structuring had a .000 p-value and an R-value of .693 which have also a significant relationship and this specific indicator garnered the least R-value but not low as 0.3. Social Dimension have a p-value of .000 which is lower than 0.05 and an R-value of .878 which has also a significant relationship. Computer self-efficacy having a p-value of .000 and an R-value of .901 which has the greatest R-value which means this specific variable had a positive correlation. Lastly, Self-Regulated Learning has a p-value of .000 which is higher than 0.05 and having an R-value of .894 which

Ho: There is no significant relationship be- interpreted as significant. As a result, the selfstating that there is no significant relationship between motivation strategies and self-regulated learning of the students. According to Chien (2012), the students that have better computer self-efficacy will embark on mastering more difficult tasks in online learning and will achieve better results. Due to that, it is important that students are trained in how to use online learning platforms, as that will enable them to be more confident and achieve better results.

> Significant Relationship Between Motivation Strategies and Academic Performance of Students

> It can be depicted that Pearson's Correlation generated a significant correlation between motivation strategies and Academic Performance of Students (r=0.702; p<.010) and learners' nutritional outcomes. Table 5 revealed the significant relationship between the extent of im-

the Academic Performance of Students. It provides information that the posed null hypothesis stating that there is no significant relationship between the motivation strategies and academic performance of students must be rejected for the results provided empirical evidence of significant results. Implementing motivation strategies and academic performance of students This find-

plementation of the motivation Strategies and ing can be inferred statistically that motivation is a great factor in promoting very extensive academic performance. This finding is similar to the study of Pelaccia (2017), who stressed that motivation is a crucial factor in academic achievement. The higher medical students' motivation, the better their learning quality, learning strategies, persistence, and academic performance

Motivation Strategies	P-value	Pearson R value	Decision	Interpretation
Intrinsic Motivation	.000	.665	Significant	Reject Null Hypothesis
Extrinsic Motivation	.000	.644	Significant	Reject Null Hypothesis
Self-Efficacy in Learning	.000	.656	Significant	Reject Null Hypothesis
<b>Overall Motivation Strategies</b>	.000	.702	Significant	Reject Null Hypothesis

Table 5. Motivation Strategies and Academic Performance of Students Correlation

*Note.* H1: There is no significant relationship between motivation strategies and students' Academic Performance.

Motivation is a concept that has attracted researchers for many decades. Medical education has recently become interested in motivation, having always believed that medical students should be motivated because of their involvement in particular training, leading to a particu- Regulated Learning and academic performance lar profession. However, medical students who lack motivation are discouraged and have lost interest in their studies, with a feeling of pow- regulated learning and academic performance erlessness or resignation (Yousefy, Ghassemi, Firouznia, 2012). Academic motivation is one of the concepts studied concerning student engagement. A previous study by Skinner et al. looked at student participation due to their initiatives. In addition, without engagement, there is no effective psychological cycle in learning and

.000, which is lower than the significance level of 0.05, and has an R-value of .875, which also shows a significant relationship. As a result,

development. Moreover, Dörnyei found that students, even those with a high level of selfefficacy, find it difficult to understand the whole unless they are actively involved in learning.

Significant Relationship Between Selfof Students Correlation

Table 6 shows the correlation between selfamong students. Metacognition strategies garnered a significant p-value of .000 and an Rvalue of .895. Environmental structuring has a p-value of .000 and an R-value of .678, which show a significant relationship. Social Dimension has a p-value of .000 and an R-value of .923, which is also significant.

Computer Self-efficacy has a p-value of mance, with a p-value of <.000 and an R-value of .897, which indicates that the independent variable has had a positive relationship with the dependent variable. Motivational strategies Self-regulated learning has a significant rela- and the self-regulated learning lead to positive tionship with the student's Academic perfor- conditioned results on academic performance

Self-Regulated Learning Variables	P-value	Pearson R value	Decision	Interpretation
Metacognition Strategies	.000	.895	Significant	Reject Null Hypothesis
Environmental Structuring	.000	.678	Significant	Reject Null Hypothesis
Social Dimension	.000	.923	Significant	Reject Null Hypothesis
Computer Self-Efficacy	.000	.875	Significant	Reject Null Hypothesis
Overall Self-Regulated Learning	.000	.897	Significant	Reject Null Hypothesis

Table 6. Self-Regulated Learning and Academic Performance of Students Correlation

*Note.* H2: There is no significant relationship between self-regulated learning and the students' Academic Performance.

(Schunk, 2005). Self-regulated learning is re- learning and motivation positively affected acalated to motivation (Schraw, Crippen, Hartley, 2006; Schunk Ertmer, 2010; Pintrich, 2010; Zimmerman, 2010; Zimmerman Schunk, 2004). Self-regulation increases learning and maintains motivation (Schunk Ertmer, 2010). There is a significant relationship between motivation and self-regulated learning (Mahmoodi, Kalantarib Ghaslanic, 2014). Carolina, Lucia, and Rossana (2014) determined that self-regulated

demic achievement. Gaythwaite (2006) found a significant relationship between final scores and self-regulated learning. Amrai, Motlagh, Zalani, and Parhon (2011) detected a correlation between academic performance and motivation. Özder and Motorcan (2013) found a significant correlation between motivation strategies and academic performance.

#### 4. **Conclusions and Recommendations**

This chapter presents the findings, conclusions, and recommendations based on the results of the data analysis, discussion, and drawing of implications. Findings are based on the problem's posed statement; conclusions are based on the findings generated, and recommendations are based on the implications of the discussions.

4.1. *Findings*—The presentation, analysis, and discussions showed the study's findings. The extent of motivation strategies in terms of Intrinsic Motivation (4.32), Extrinsic Motivation (4.32), and Self-Efficacy in Learning (4.30)suggests that the extent of implementation of the motivation strategies was always manifested. The overall mean rating of 4.30 with the descriptive rating of very extensive denotes or always manifested the pervasive motivation strategies of learners in Caraga Davao Oriental. The extent of self-regulation in terms of Metacognition Strategies (3.03) and environmental Structuring (3.02) was moderately extensive, while academic improvement (3.02) was moderately

extensive, and Computer Self-Efficacy (2.93) was moderately extensive. The overall mean rating of 3,00 denotes moderately extensive selfregulation due to some factors, such as distraction or parental support of their learners.

The Academic Performance of Students was 4.22 or very extensive. Pearson's Correlation generated a significant correlation between the motivation strategies (r=0. .894; p;.012) and self-regulated learning. Pearson's Correlation generated a significant correlation between the motivation strategies (r=0. 702; pj.012) and academic performance. Pearson's Correlation generated a significant correlation between selfregulated learning (r=0. 897p;.012) and academic performance.

4.2. *Conclusions*—Given the findings of the study presented, the following were the conclusions to wit; The presentation, analysis, and discussions showed the study's findings. The extent of motivation strategies in terms of Intrinsic Motivation, Extrinsic Motivation, and Self-Efficacy in Learning suggests that the extent of implementation of the motivation strategies was pervasive and interpreted as always manifested. The overall mean rating of 4.30 with the descriptive rating of very extensive denotes the pervasive motivation strategies of learners in Caraga Davao Oriental. The extent of self-regulation regarding Metacognition Strategies and environmental Structuring was moderately extensive, academic improvement was moderately extensive, and Computer Self-Efficacy was moderately extensive. The overall mean rating denoted moderately extensive self-regulation due to some factors, such as distraction or parental support of their learners. The Academic Performance of Students was very extensive. There was a significant relationship between the motivation strategies and self-regulated learning. There was a significant relationship between the motivation strategies and academic performance. There was a significant relationship between self-regulated learning and academic performance

4.3. Recommendations—With the presented conclusions of the study, the following were recommendations to wit; DepEd officials may design curriculum planners that encourage students' autonomy in learning. Teaching different processes that intervene in self-regulated learning within the different areas of the curriculum is important. It is essential to integrate self-regulation activities and strategies within the school context and the different curriculum subjects and to help students modify them and adapt them to the different learning situations. All involved in education have raised hopes that

psychological knowledge about how students become self-regulated learners and about successful instruction will help us bridge the gap between teaching students disciplinary knowledge and allowing them to acquire strategic knowledge. School Heads may continuously improve their practices in collaborating with parents and other stakeholders in the modular mode of delivery by reviewing policies related to governance, partnerships, and implementation to augment learners' growth and progress. Teachers may try to adopt student-centered classroom activities and encourage students to self-regulate their learning processes by revealing new trends in self-regulated learning. Self-regulated learning is a complex phenomenon. Undoubtedly, additional research must pay more attention to the different dimensions. This study has several limitations, many unfamiliar to studies based on survey data. More research is also needed on the relationship between the students' self-regulatory learning, the instructional approach adopted, and the connection between self-regulation skills and students' academic achievement in the different disciplines. Students may try to improve their self-efficacy beliefs by regularly engaging in highly demanding academic tasks and developing intrinsic motivation as they approach a new learning task. Researchers also point out some of the main directions where future research should be focused: Improving the definition and making the main processes and activities involved in selfregulated learning more operational, as well as the differences between this construct and those related to it. For example, self-control, metacognition. Development of more complete models which incorporate concepts referring to dynamic forces that affect the self-regulation process. Studying the influence of personal human development on the process of self-regulation of learning. Examining the role of individual and cultural differences in self-regulated learning.

# 5. References

- Abdi A. Investigating the Relationship between Academic Self-Concept, Progressive Motivation and Academic Achievement of Students of the Second National Conference on Psychology and Behavioral Sciences 2014; Code 106
- Alario-Hoyos C, Estevez-Ayres I, P ' erez-Sanagust ' 'ın M, et al. (2017) Understanding learners' motivation and learning strategies in MOOCs. International Review of Research in Open and Distance Learning 18(3): 119–137. DOI: 10.19173/irrodl.v18i3.2996.
- Alonso-Menc'ıa ME, Alario-Hoyos C, Estevez-Ayres I, et al. (2021) Analysing self-regulated learning ' strategies of MOOC learners through self-reported data. Australasian Journal of Educational Technology 37(3): 56–70.
- Ally, M. (2004). Foundations of educational theory for online learning. In T. Anderson (Ed.), The Theory and Practice of Online Learning. Edmonton, CA: Athabasca University Press.
- Anderson, Krathwohl, & Bloom, 2001; Semper, 2008). Anderson, L. W., Krathwohl,
- Anthony, S. (2015).What are Modules? Retrieved from CANVAS:https://community.canvaslms.c om/t5/Canvas-Basics-Guide/What-are-Modules/ta-p/
- D. R., & Bloom, B. S. (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. London:
- Longman. & Semper, H. M. (2008). Using a trait complex model to predict types of academic performance in undergraduate medical education in the UK. University of Nottingham, Nottingham.
- Badubi Reuben M. (2017). Theories of Motivation and Their Application in

Organizations: A Risk Analysis. International Journal of Innovation and

- Bandura A. Perceived self-efficacy on cognitive development and functioning. Educ Psychol 1993; 28: 2.
- Bandura, A. (1986). Social Foundations of Thought and Action: A Social Cognitive Theory. Englewood Cliffs, NJ: Prentice-Hall.
- Barmby, P., Kind, P.M., & Jones, K. (2008). Examining changing attitudes in secondary school science. International Journal of Science Education, 30(8), 1075-1093. <u>http://dx.doi.org/10.1080/09500690701344966</u>
- Barnard-Brak, L., Paton, V. O., & Lan, W. Y. (2010). Profiles in self-regulated learning in the online learning environment. The International Review of Research in Open and Distributed Learning, 11(1), 61–80.

- Baumeister, R. F., & Tierney, J. (2011). Willpower: Rediscovering the greatest human strength. New York, NY: Penguin
- Begum, Syeda Farhath & Hamzah, Mohd Hilmi. (2017). Effect Of Intrinsic and Extrinsic Motivation on Teachers In Secondary Schools Of Telangana. Pune Research Discovery. 2. 1-7.
- Boekaerts, M. (2002). Motivation to Learn: Education Practices, Series 10. International Academy of Education. Retrieved from <u>http://www.ibe.unesco.org</u>
- Broadbent J and Poon WL (2015) Self-regulated learning strategies & academic achievement in online higher education learning environments: a systematic review. The Internet and Higher Education 27: 1–13. DOI: 10.1016/j.iheduc.2015.04.007
- Chang, C., & Chang, C.-K. (2014). Developing students' listening metacognitive strategies using online videotext self-dictation-generation learning activity. The EUROCALL Review, 22(1), 3–19.
- Cox J. (2019).Management For An Effective Learning Environment Https://Www.Teachhub.Com/Classroom-Management/2019/05/Classroom-Management-For-An-Effective-Learning-Environment/
- Dev, P.C. (1997). Intrinsic motivation and academic achievement: What does their relationship imply for the classroom teacher? Remedial and Special Education, 18(1), 12-19.
- Duncan, T., Mckeachie, W.J. (2015). Motivated Strategies for Learning Questionnaire (MSLQ) Manual. Research Gate. 10-16
- Elvers, G. C., Polzella, D. J., & Graetz, K. (2003). Procrastination in online courses: Performance and attitudinal differences. Teaching of Psychology, 30(2), 159–162.
- Gambo Y and Shakir MZ (2021) Review on self-regulated learning in smart learning environment. Smart Learning Environments 8(1): 1–14. DOI: 10.1186/s40561-021-00157-8
- Geduld B (2016) Exploring differences between self-regulated learning strategies of high and low achievers in open distance learning. Africa Education Review 13(1): 164–181. DOI: 10.1080/18146627.2016. 1182739.
- Green, J., Nelson, G., Martin, A. J., & Marsh, H. (2006). The Causal Ordering of Self-concept and Academic Motivation and its Effect on Academic Achievement. International Education Journal, 7 (4), 534-546.
- Green, S. K. (2002). Using an Expectancy-Value Approach to Examine Teachers' Motivational Strategies. Teaching and Teacher Education, 18, 989-1005.
- Gribanova Svetlana. (2020). The Impact of Intrinsic and Extrinsic Motivators on IT professionals. Case of Latvia. SHS Web of Conferences, 92. The 20th International Scientific Conference Globalization and its Socio-Economic Consequences 2020.

- Grossman, P. & Stodolsky, S. (1994). Considerations of content and the circumstances of secondary school teaching. In L. Darling-Hammond, ed., Review of Research in Education, Vol. 20 (pp. 179-221). Washington, DC: American Educational Research Association.
- Hansford, B.C., and Hattie, J.A. 2017. The relation between self-concept and achievement performance measure. Review of Educational Research 2017; 52: 123-142.
- Harris, K. R., Friedlander, B. D., Saddler, B., Frizzelle, R., & Graham, S. (2005). Self-monitoring of attention versus self-monitoring of academic performance: Effects among students with ADHD in the general education classroom. The Journal of Special Education, 39(3), 145– 156. doi:10.1177/002246 69050390030201.
- Hashemi Z. Comparison and investigation of the relationship between self-control and self-concept and academic achievement of students with thalassemia and normal. Master's Thesis. Tehran Tarbiat Modares, 2014.]
- Hawthorne,H (2021). Understanding the Importance of Motivation in Education. https://www.highspeedtraining.co.uk/hub/motivation-in-education November 17, 2021 Article.
- Hendriati Agustiani, Surya Cahyad, Muwaga Musa, (2016). Self-efficacy and Self-Regulated Learning as Predictors of Students Academic Performance, v.9, p.1-6
- Hiltz, S., & Goldman, R. (2005). What are asynchronous learning networks? In S. Hiltz & R. Goldman (Eds.), Learning together online: Research on asynchronous learning networks (pp. 3-18). Mahwah, NJ: Lawrence Erlbaum.
  - Hughes, M., A., Knowles, S., F., Dhingra, K., Nicholson, H., L., Taylor, P., J., (2018). "This corrosion: A systematic review of the association between alternative subcultures and the risk of self-harm and suicide.". British Journal of Clinical Psychology. 57(4):491-513. Epub 2018 Mar 25
- Ifeanyi, I. P., & Chukwuere, J. E. (2018). The impact of using smartphones on the academic performance of undergraduate students. Knowledge Management & ELearning, 10(3), 290–308.
- Jegede, S.A. (2007). Students' anxiety towards the learning of chemistry in some Nigerian secondary schools. Educational Research and Review, 2(7), 193-197.
- Karalis, T. (2020). Planning and Evaluation during Educational Disruption: Lessons Learned from COVID 19 Pandemic for Treatment and Emergencies in Education. European Journal of Education Studies, 7(4). <u>https://doi.org/10.5281/zenodo.3789022</u>
- Kendra C(2024), MS, What Is Extrinsic Motivation? is a psychosocial rehabilitation specialist, psychology educator, and author of the "Everything Psychology Book."
- Kosnin AM. Self-regulated learning and academic achievement in Malaysian undergraduates, International Education Journal 2017; 8(1): 221-228.

- Ku, D., & Chang, C. (2011). The effect of academic discipline and gender difference on Taiwanese college students' learning styles and strategies in web-based learning environments. Turkish Online Journal of Educational Technology, 10(3), 265–272
- Lee D, Watson L, Watson W, et al. (2020) The influence of successful MOOC learners'self-regulated learning strategies, self-efficacy, and task value on their perceived effectiveness of a massive open online course. International Review of Research in Open and Distributed Learning 21(3). DOI: 10.19173/irrodl.v21i3. 4642.
- Lepper, M. R. (1988). Motivational Considerations in the Study of Instruction. Cognition and Instruction, 5(4), 289-309.
- Levy, Y., & Ramim, M. (2012). A study of online exams procrastination using data analytics techniques. Interdisciplinary Journal of E-Learning and Learning Objects, 8(1), 97–113
- Li, L. K. Y. (2012). A study of the attitude, self-efficacy, effort and academic achievement of CityU students towards research methods and statistics. Discovery SS Student E-Journal, 1(2), 154–183.
- Lin X (2019) Achievement goal orientations as predictors of self-regulated learning strategies of international ESL students. International Journal of Teaching and Learning in Higher Education 31(2): 214–223.
- Liu, Jianguo & Dietz, Thomas & Carpenter, Stephen & Alberti, Marina & Folke, Carl & Moran, Emilio & Pell, Alice & Deadman, Peter & Kratz, Timothy & Lubchenco, Jane & Ostrom, Elinor & Ouyang, Zhiyun & Provencher, William & Redman, Charles & Schneider, Stephen & Taylor, William. (2007). Complexity of Coupled Human and Natural Systems. Science (New York, N.Y.). 317. 1513-6. 10.1126/science.1144004.
- Locke, E.A., & Latham, G. P., (1990). A theory of goal setting and task performance. Englewood Cliffs, NJ: Prentice Hall
- Loganathan, Saranraj & Zafar, Shahila. (2020). The effect of Intrinsic and Extrinsic Motivation in L2 Learning amongst engineering college students: An investigation. GEDRAG & ORGANISATIE REVIEW. 33
- Lowenthal, P. R., & Dunlap, J. (2011). Investigating students' perceptions of various instructional strategies to establish social presence. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Michinov, N., Brunot, S., Le Bohec, O., Juhel, J., & Delaval, M. (2011). Procrastination, participation, and performance in online learning environments. Computers & Education, 56(1), 243–252
- Nock, M. K. (2010). "Self-injury". Annual Review of Clinical Psychology, 6, 339-363
- Norman E. (2020). Why Metacognition Is Not Always Helpful Front Psychol. 2020 Jul 2:11:1537. doi: 10.3389/fpsyg.2020.01537. eCollection 2020

- Olowoselu, A., Nyako, M. A., Bello, A. S. & Joda, F. (2016). Analysis of Lecturers on Factors Affecting Quality of Training in Teacher Education. The Journal of Social Sciences Research, 2(12), 195-198.
- Ophus, J. D., & Abbitt, J. T. (2009). Exploring the potential perceptions of social networking systems in university courses. MERLOT Journal of Online Learning and Teaching, 5(4), 639–648
- Osborne, J.F., & Collins, S. (2001). Pupils' views of the role and value of the science curriculum: A focus-group study. International Journal of Science Education, 23(5), 441-468. http://dx.doi.org/10.1080/09500690010006518
- Oyelere SS, Olaleye SA, Balogun OS, et al. (2021) Do teamwork experience and self-regulated learning determine the performance of students in an online educational technology course? Education and Information Technologies 26: 5311–5335. DOI: 10.1007/s10639-021-10535-x
- Pelaccia T, (2017). Motivation in medical education. Viau R. Med Teach. 2017;39:136–140. [PubMed] [Google Schola
- Pintrich, P. R. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. Educational Psychology Review, 16 (4), 385-407. doi:10.1007/s10648-004-0006-x
- Pintrich, R. R., & DeGroot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. Journal of Educational Psychology, 82, 33-40. doi:10.1037//0022-0663.82.1.33
- Pintrich, P.R. (1999). An achievement goal theory perspective on issues in motivation terminology, theory, and research. Contemporary Educational Psychology, 25, 92-104. doi:10.1006/ceps.1999.1017
- Ratten, V. (2013). Cloud computing: A social cognitive perspective of ethics, entrepreneurship, technology marketing, computer self-efficacy and outcome expectancy on behavioural intentions. Australasian Marketing Journal, 21(3), 137–146.
- Raulin, M.L., & Graziano, A.M., (2000) Research methods: A process of inquiry 2000.
- Serdyukov, P., & Hill, R. (2013). Flying with clipped wings: are students independent in online college classes? Journal of Research in Innovative Teaching, 6(1), 54–67.
- Shannon, S. V. (2008). Using metacognitive strategies and learning styles to create selfdirected learners. Institute for Learning Styles Journal, 1, 14–28.
- Shahsooni S. Reasons for reducing the motivation to study in high school students in Isfahan. The Research Council of the Education Directorate of Isfahan Province, 2017.

- Shabani H. Educational skills of Tehran, Organization of studying and compiling humanities books of universities, 2014.
- Shea, P., & Bidjerano, T. (2010). Learning presence: Towards a theory of self-efficacy, self-regulation, and the development of a communities of inquiry in online and blended learning environments. Computers & Education, 55(4), 1721–1731.
- Schunk, D.H. (1989). Self-efficacy and achievement behaviors. Educational Psychology Review, 1, 173–208.
- Schunk, D. H. (1991). Self-efficacy and academic motivation. Educational Psychologist, 26, 207–231.
- Tsai, C. W. (2010). The effects of feedback in the implementation of web-mediated self-regulated learning. Cyberpsychology, Behavior, and Social Networking, 13(2), 153–158.
- Türker Oztürk M," and Pınar Mıhcı P(2021). Analysis of self-regulated learning strategies used by online learners. Department of Instructional Technologies, Aksaray University, Aksaray.
- Umbach, P., & Wawrzynski, M. (2005). Faculty do matter: The role of college faculty in student learning and engagement. Research in Higher Education, 46, 153-184.
- U.S. Department of Education, Office of Planning, Evaluation, and Policy Development (2009). Evaluation of Evidence-Based Best Practices in Online Learning: A Meta-analysis and Review of Online Learning Studies. (Washington D. C.).
- Vonderwell, S., Liang, X., & Alderman, K. (2007). Asynchronous discussions and assessment in online learning. Journal of Research on Technology in Education, 39(3), 309–328.
- Wandler JB and Imbriale WJ (2017) Promoting undergraduate student self-regulation in online learning environments. Online Learning 21(2). DOI: 10.24059/olj.v21i2.881
- Wang, C.H., Shannon, D., & Ross, M. (2013). Students' characteristics, self-regulated learning, technology self-efficacy, and course outcomes in online learning. Distance Education, 34(3), 302–323.
- Waschull, S.B. (2001). The online delivery of psychology courses: attrition, performance, and evaluation. Teaching of Psychology, 28, 143–147.
- Wong, J., Baars, M., Davis, D., Van Der Zee, T., Houben, G.-J., & Paas, F. (2019). Supporting Self-Regulated Learning in Online Learning Environments and MOOCs: A Systematic Review. International Journal of Human-Computer Interaction, 35(4–5), 356–373. doi:10.1080/10447318.2018.1543084
- Wolters, C. A. (1998). Self-regulated learning and college students' regulation of motivation. Journal of Educational Psychology, 90(2), 224-235. doi:10.1037/0022-0663.90.2.224
- Wolters, C., Pintrich, P., & Karabenick, S. (March, 2003). Assessing academic self-regulated learning. Presented at Indicators of Positive Development Conference sponsored by Child Trends, Washington, DC.

- Wood, R., & Locke, E. (1987). The relation of self-efficacy and grade goals to academic performance. Educational and Psychological Measurement, 47, 1013- 1024 doi:10.1177/0013164487474017
- Yousefy A, Ghassemi G, Firouznia S. J (2012). Motivation and academic achievement in medical students. *Educ Health Promot.* 2012;1:4. [PMC free article] [PubMed] [Google Scholar]
- Zechmeister EB, Shaughnessy JJ. (1994) A practical introduction to research methods in psychology. University of California: McGraw-Hill 1994.
- Zhang, W.-Y., Perris, K., & Yeung, L. (2005). Online tutorial support in open and distance learning: Students' perceptions. British Journal of Educational Technology, 36(5), 789–804.
- Zheng, C., Liang, J.-C., Yang, Y.-F., & Tsai, C.-C. (2016). The relationship between Chinese university students' conceptions of language learning and their online selfregulation. System, 57, 66–78
- Zimmerman, B. J., & Martinez-Pons, M. (1990). Student differences in self-regulated learning: Relating grade, sex, and giftedness to self-efficacy and strategy use. *Journal of Educational Psychology*, 82(1), 51–59. <u>https://doi.org/10.1037/002-0663.82.1.51</u>
- Zheng, C., Liang, J.-C., Yang, Y.-F., & Tsai, C.-C. (2016). The relationship between Chinese university students' conceptions of language learning and their online self-regulation. System, 57, 66–78.
- Zhu, Y., Au, W., & Yates, G. (2016). University students' self-control and self-regulated learning in a blended course. The Internet and Higher Education, 30, 5462
- Zhu Y, Zhang JH, Au W, et al. (2020) University students' online learning attitudes and continuous intention to undertake online courses: a self-regulated learning perspective. Educational Technology Research & Development 68(3): 1485–1519. DOI: 10.1007/s11423-020-09753-w