ACADEMIC MOTIVATION AND SELF-REGULATED LEARNING IN PREDICTING ACADEMIC ACHIEVEMENT OF LETRAN FRESHMEN

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ABSTRACT

Quality education is viewed as a crucial factor that weighs in an individual's success in life. The psychological factors behind a student's motives to obtain success in their academics have continued to be an area of interest. However, there has been a lack of an existing study conducted to develop a model of prediction that best explains the most appropriate predictor of academic achievement in a Philippine school setting. Hence, the main purpose of this study is to determine if the academic achievement of first-year college students can be predicted by their academic motivation and self-regulated learning. The study employed correlational predictive design to determine predictive relationships of academic motivation and self-regulated learning for one's academic achievement. The participants are 51 first-year students from Colegio de San Juan de Letran - Manila and were determined using purposive sampling according to an inclusion criteria. The researchers have used an online survey method to gather data from them that consisted of two different research instruments. Statistical findings revealed that there was insufficient evidence to claim that both academic motivation and academic self-regulated learning have significant relationships with the academic achievement of the participants. Conclusively, the study disclosed that both academic motivation and academic self-regulated learning were not significant predictors of academic achievement.

Keywords: academic motivation, academic self-regulated learning, academic achievement

INTRODUCTION

Quality education is widely viewed as a crucial factor that weighs in an individual's success in life. One of the most important milestones one can achieve is the attainment of higher education. In the Philippines, the Commission on Higher Education (CHED) implemented an application for the country adapting on the global teaching-learning methods and competitiveness through CHED Memorandum Order No. 46 in 2012. This aimed to enhance quality assurance of learning and establish an integrated educational system relevant to the needs and demands of the developed countries. The memorandum has been the main impetus of higher education institutions in the country to make certain that Filipino students and graduates will be well-equipped and prepared for the so-called 'real world' (Crespo et al., 2010).

Advancing a globally competitive educational sector is a challenge that the Philippine government needed to address. In the 2017-2022 nationwide Developmental Plan of National Economic and Development Authority (NEDA), it is stated that reducing rates in students dropping out and increasing completion rates across all disciplines in higher education are two of the strategies of CHED in attaining a higher number of human resources in the country. In 2019, Professional Regulation Commission (PRC) and CHED reported that the number of enrollees in higher education institutions for the Academic Year 2018-2019 reached 3.2 million while only 800,000 students are graduating with their

respective degrees. This means that the dropout rate reached an alarming 75.21 percent; majority of them are amongst first-year students. This interminable circulating issue provoked researchers to study the factors that affect the decision of students to drop out. The study of Azarcon et al. (2014) found out that financial constraints and lack of motivation were the usual motivators that greatly determined those decisions of Filipino students.

The motives behind working hard, how to excel in school, being disciplined in class, all in addition to the factors that predict academic achievement of college students have continued to be areas of interest for educational stakeholders, counseling professionals, and researchers in the country. Over the past decades, education has been used as a tool to mold children into a mature, skilled professional ready to take challenges in a competitive global field. However, there is a need to know the predictors of success in academe to lessen the dropout rate in the Philippines, particularly the psychological reasons behind it. Magulod (2017) identified some reasons why students perform poorly in schools that include limited learning resources, financial instability, indiscipline, poor school administration, and such. However, these are considered environmental and economic factors, not psychological. As stated by Alipio (2020), there is a current blur on which of the psychological factors or other cognitive determinants are best considered to be stable and accurate predictors of academic performance in higher education. Hence, this research study focused on two individual factors that may contribute to academic achievement: the academic motivation and academic self-regulated learning of a student.

In discussing both the academic motivation and academic self-regulated learning as variables of this study, both concepts of Self-Determination Theory and Social Cognitive Theory of Self-Regulation, in relation with developmental psychology, are involved. Edward Deci and Richard Ryan (1985) supplied a distinguished approach to motivation and separated it into three categories: amotivation, extrinsic motivation, and intrinsic motivation. The concept for this theory made its reference on an individual's guiding behavior, innate strength, and own psychological needs. The self-determination theory of Deci and Ryan further suggests that people can become self-determined when they have fulfilled their need for autonomy, competence, and connection.

The psychological growth of an individual, as described by the self-determination theory, does not occur instantly. Psychologists assume that growing up, individuals are constantly being influenced by the environmental and behavioral events in their lives. As a result, Robert Bandura (1986) proposed a theory of self-regulated learning of a student established from Social Cognitive Theory. Self-regulation deals specifically with the situation that a learner is in, using their own result-oriented attitude as a reference to deliberately regulate their behavior and establish a learning environment for themselves. In practice, students who are older and have more experience are believed to be able to better self-regulate themselves in a learning set-up, which helps them to further improve their academic performance.

With the Self-Determination Theory and Social Cognitive Theory of Self-Regulation, it is evident that learners differ from each other based on their types and levels of academic motivation, their self-regulated learning strategies, and their performance in academics as a result of the two. This information served as a helpful ground for the researchers to comprehend the psychological factors that may contribute to the academic achievement of learners, particularly students in higher education. The findings of this study may add to the existing literature in predicting the academic achievement of Filipino college students.

Rationale

The study was intended to determine the academic motivation and academic self-regulated learning of students as predictors of their academic achievement in college. The researchers aimed to identify the possible factors and concepts that may contribute to the academic achievement of college students. This led to the consideration of the psychological factors that comprise academic motivation and academic self-regulated learning, which are the variables that the researchers investigated.

A college student whose level of academic motivation is high is believed to have a high success rate in terms of their academic achievement (Ajayi, Lawani, and Salomi, 2012). Motivation encompasses the self-determination of the student to thrive in the field of academics and the urge to achieve success in their efforts and work (Gesinde, 2000). However, the level of motivation differs from one student to another. According to Yarborough and Fedesco (2020), the motivation on how the students act in a learning set-up always concerns the question of 'why'. A student who is highly motivated to do work out of self-interest and curiosity to discovery is said to be motivated intrinsically, whereas another student who is motivated out of getting the approval

of someone else—preferably a person with authority—is said to be extrinsically motivated. Additionally, there is another type of student who lacks personal drive to act or work in a learning set-up, being described as a learner who is amotivated.

These differences in the type and level of academic motivation describes why there are some students who excel and thrive more in school than others despite being subjected to similar experiences of schooling. The significance of the difference in the type and level of academic motivation in predicting academic achievement of first-year students of Letran Manila needs to be explored to help in directing them towards excelling in different learning set-ups.

It is reported by Kitsantas (2002) that there is an interchange between academic motivation and academic self-regulation in predicting academic achievement; and it is important to be investigated more. Self-regulation refers to the thoughts and actions for accomplishing goals that are generated by the self. Dembo and Eaton (2000) found out that a lack of self-regulatory behavior results in underachievement in school performance. Learners with this type of behavior have been discovered to have a sense of control, discipline, and direction towards themselves when dealing with academic tasks. This information in mind stimulated the design of the current study that might contribute to the field of educational research.

There is so far no study conducted to develop a model of prediction that best explains the most appropriate predictor of achievement in a Philippine school setting. Hence, it is unclear which is the best predictor of academic achievement of college students. The purpose of this study is to establish the relationship of academic motivation and self-regulated learning on academic achievement of first-year students of Letran Manila. Additionally, the need to determine if academic achievement can be predicted by both motivation and self-regulated learning is highlighted. The findings of this study may add to the existing materials and literature surrounding predictors of academic achievement of a student.

Conceptual Framework

Figure 1 describes the conceptual framework of the study wherein the interrelationship among the variables is represented. The academic achievement of a student may be influenced by the level of their academic motivation and their self-regulated learning strategy. A student with a high academic motivation score is likely to be a self-regulated learner, thus going to have a high academic performance. On the other hand, a student with a low academic motivation score is also likely to not incorporate self-regulated learning strategies, thus being a low academic achiever.

Figure 1. Conceptual Framework

Review of Related Literature

Academic Motivation

An intensive amount of research has been done in exploring the nature of academic motivation and previous studies have found it relevant in concepts surrounding the behavior of students in their strategies for learning. It is defined that academic motivation, in general, is a drive for executing tasks in school or finishing education. It has been a key factor in engaging in a behavior for learning (Wilkesmann & Virgillito, 2012).

In accordance with the study of Amrai et al. (2011), academic motivation of students is influenced by four factors, namely: external stimuli, internal stimuli, a goal or purpose for the behavior, and an instrument for the behavior. Studies show that academic motivation is indeed susceptible to change as time goes by. It is influenced by external factors as exhibited in Gilig's 2016 study on how higher education curriculum and teaching techniques can either increase or decrease college students' academic motivation through their mainstay in college. The concept that academic motivation is dynamic and can be socially constructed (Jarvela & Jarvenoja, 2011) through the means of a students' environment, is inclined with Bandura's theory on social learning wherein motivation, as the final drive for replicating a behavior, is influenced by what individuals see in their peers or what they consider as role models depending on how these 'role models' are rewarded or punished by society.

The concept that deals with how academic motivation and related variables (e.g., self-efficacy) are related to a student's resulting learning behavior is discussed to be plausible. This is due to previous literature indicating that both extrinsic and intrinsic motivation (e.g., competitiveness, a good future, or earning a reward) serve an imperative role

in determining how they study (Bryant, 2017; Datu 2017). According to Mizuno et al. (2011) in their study of academic motivation, their results show that cognitive function has no significant relationship with any decrease of motivation in students, although it does associate itself with memory. Furthermore, academic motivation actually deals better with significant relationship on factors like academic achievement and an individuals' self-concept of whether they are more likely to be successful in a task (Bryant, 2017; Steinmayr, 2019).

In relation, numerous previous studies have also shown a positive significant relationship between academic motivation and academic achievement through correlational approaches and determining how different domains of student motivation influence or contribute to their resulting academic achievement (Steinmayr, 2019; Amrai et al., 2011).

Academic Self-regulated Learning

Self-regulation is defined as the beliefs of the learners about their capability to engage in appropriate actions, thoughts, feelings, and behaviors in order to pursue valuable academic goals (Zimmerman, 2001). There have been many studies conducted regarding the relationship of self-regulated learning, and how it affects academic performance in the classroom, whether it be on physical ground (face-to-face classes) or through the internet (online classes). With self-regulated study, there are also other factors involved and carefully studied (i.e., academic motivation, environment, and self-control). There are factors that may very well affect the students' performance and capability that are not always seen because it all happens behind the scenes; mostly, behind the eyes of educators.

Inside school premises, teachers have a vital role in promoting self-regulated learning. Before they even promote it to students, they themselves have to be practicing self-regulated learning so that when they present it to their class, it is presented in a way that is interesting to the students (Moos & Ringdal, 2012). In order to achieve this, teachers are given different techniques to promote self-regulated processes that facilitate their learning. Those techniques are as follows: goal setting (Winne & Hadwin, 1998; Wolters, 1998), planning (Zimmerman, 2004), self-motivation (Corno, 1993; Wolters, 2003; Zimmerman, 2004), attention control (Harnishferger, 1995; Kuhl, 1985; Winne, 1995), flexible use of learning strategies (van den Broek et al., 2001; Winne, 1995), self-monitoring (Butler & Winne, 1995; Carver & Scheier, 1990), appropriate help-seeking (Butler, 1998; Ryan, Pintrich, & Midgley, 2001), and self-evaluation (Schraw & Moshman, 1995).

Regarding self-regulation learning through online classes, the study conducted by Yot – Dominguez, and Marcelo (2017) shows that students do not even utilize self-regulated learning techniques due to the fact that technology is readily available everywhere. With a simple search on the internet where they easily have their answers to their inquiries, it harms the students as they do not go through the processes that Zimmerman proposed that helps the student get better at their work.

Relationship between Academic Motivation & Self-regulated Learning

In the study of Jarvela & Jarvenoja (2011) on both variables, their findings came upon the conclusion that motivation can be considered a socially constructed concept and that regulating academic motivation holds a great deal of necessity for the students' capability of a socially self-regulated learning. Moreover, the discussion of statements about how self-regulated learning is driven by one's academic motivation can be influenced by the environmental state of a student where they learn. The claim is made evident by Boekarts & Cascallars (2006) where they mention in their study that the ability to study effectively through self-regulated learning is a behavior that is driven by a will or a motivation to do so. Successively, self-regulated learning is induced by an individual's self-concept of how they should learn, which then is influenced by factors concerning their social interactions, hence the variables being 'socially constructed' because learning behaviors are affiliated with motivation, which is the affiliated with how students observe the subject or role models in their surrounding; a concept inclined with Bandura's Social Learning Theory.

Mahmoodi, Kalantari & Rozhin (2014) explored the self-regulatory learning strategies used by their respondents who are 130 students taking English as a Foreign Language (EFL). They also established the relationship between motivation and self-regulated learning and the relationship between self-regulated learning and achievement. Findings of their study concluded that there is indeed a positive significant relationship between the variables of academic motivation and self-regulated learning of students. However, the relationship between self-regulated learning and achievement was considerably weak. The established relationship between

academic motivation and self-regulated learning supports the statements of how the academic motivation of students measured through a scale can predict their possible academic achievement.

In addition to this, a study done by Harris et al. (2002) stated that factors (i.e., motivation, self-control, and self-regulation) is indeed a driving force where it can dictate how a student does an activity or does any sort of challenges for that matter. Moreover, Graham & Harris (2005) also emphasized the fact that teachers have such a vital role in making sure that students develop good study habits by carefully demonstrating specific self-regulation tactics that will greatly improve students' learning moving forward.

Statement of the Problem

Poor academic success among Filipino college learners may lead to the downfall of CHED's strategies in reducing rates of dropouts and increasing completion rates across all disciplines in higher education in the country. Thus, there is a need to explore and investigate the psychological factors that are linked with the academic achievement of a learner. Establishing the predictive weight of the academic motivation and academic self-regulated learning is also beneficial for the study's aim to determine if they can predict the academic achievement of first-year students in Letran Manila.

The current study sought to determine the answers to the following questions:

- Is there a significant relationship between the academic achievement of first-year students in Letran Manila and their academic motivation?

- Is there a significant relationship between the academic achievement of first-year students in Letran Manila and their academic self-regulated learning?

- Can the academic achievement of first-year students in Letran Manila be predicted through their level of academic motivation and academic self-regulated learning?

Hypotheses

This study was guided by the following null and research hypotheses:

H_{01}: There is no significant relationship between academic motivation and the academic achievement of first-year students in Letran Manila.

H_{a1}: There is a significant relationship between academic motivation and the academic achievement of first-year students in Letran Manila.

H_{02}: There is no significant relationship between academic self-regulated learning and the academic achievement of first-year students in Letran Manila.

H_{a2}: There is a significant relationship between academic self-regulated learning and the academic achievement of first-year students in Letran Manila.

H_{03}: Academic motivation and academic self-regulated learning do not significantly predict academic achievement of first-year students in Letran Manila.

H_{a3}: Academic motivation and academic self-regulated learning significantly predict academic achievement of first-year students in Letran Manila.

METHODOLOGY

This research employed a descriptive correlational design in determining and examining the association between the variables. A descriptive correlational design is a type of non-experimental research design that measures a relationship between two given variables without the intervention of the researcher. Its purpose is to determine whether there is a positive (where both variables change in the same direction), a negative (where the variables change in opposite directions), or a zero correlation (no relationship is found). Additionally, the predictive nature of the said design was used to determine predictive relationships of academic motivation and self-regulated learning (as predictors) for the academic achievement (as criterion variable) of first-year students of Letran Manila.

Participants

The participants of this study were 51 first-year students of Colegio de San Juan de Letran – Manila that are currently enrolled for the Academic Year 2020-2021 from ten different undergraduate programs: 23 participants from BS Psychology, nine from BS Civil Engineering, five from AB

Communication, three from BS Accountancy and BS Information Technology, two from AB Political Science, BS Business Administration, and BS Nutrition and Dietetics, and one from BS Electronics Engineering and BS Electrical Engineering.

Participation was voluntary, and the technique of determining the participants used purposive sampling according to an inclusion criteria set by the researchers: (1) must be a bonafide First-Year student in Letran Manila, and (2) must be willing to share their GWA on the first semester of A.Y. 2020-2021, They were informed firsthand by the researchers about the nature of the study through an informed consent form provided in Appendix A.

Instruments

The researchers used a survey questionnaire method to gather data from the participants. The survey consisted of demographic information questions and two different research instruments. The demographic component included questions regarding age, gender, college program, and their GWA in the first semester of the A.Y. 2020-2021. The instruments utilized were the Academic Motivation Scale (AMS) and Academic Self-Regulated Learning Scale (A-SRL-S)

Academic Motivation Scale (AMS)

The Academic Motivation Scale (AMS) is constructed and developed by Vallerand et al. (1992) that is used to measure the academic motivation of the respondents. The scale includes 28 items divided into seven subscales: three factors for intrinsic motivation (to know, toward accomplishment, to experience stimulation), three factors for extrinsic motivation (identified, introjected, and external regulation), and one factor for amotivation. Each factor has four items, and each item has seven-point response categories ranging from 1 = totally disagree to 7 = totally agree. Validity and reliability evidence is collected from studies conducted by Vallerand et al. (1992) with 745 college students from the province of Ontario, Canada. The reliability evidence is obtained through internal consistency using Cronbach's alpha reliability. The validity evidence is obtained through peer review, confirmatory factor analysis, examination of relationships, and relations with other variables. Vallerand et al. (1992) reported that reliability coefficients and the test-retest correlations of the subfactors are considered to be high enough to warrant the use of the scale as shown in Table 1.

Table 1. Internal Consistency Values and Test-Retest Correlations of Academic Motivation Subscales

Subscale	Number of items	Cronbach's alpha reliability coefficient	Test-Retest correlations
IM – to know	4	.84	.79
IM – toward accomplishment	4	.85	.83
IM – to experience stimulation	4	.86	.80
EM – identified regulation	4	.62	.71
EM – introjected regulation	4	.84	.73
EM – external regulation	4	.83	.83
Amotivation	4	.85	.83

Note. IM - Intrinsic Motivation. EM - Extrinsic Motivation.

Academic Self-Regulated Learning Scale (A-SRL-S)

The Academic Self-Regulated Learning Scale (A-SRL-S) is constructed and developed by Magno (2010) that is used to measure the academic self-regulated learning of the respondents. The scale includes 55 items divided into seven subscales under self-regulation: (1) memory strategy, (2) goal setting, (3) self-evaluation, (4) seeking assistance, (5) environmental structuring, (6) learning responsibility, (7) planning and organizing. Each item has four-point response categories ranging from 1 = strongly disagree to 4 = strongly agree. Validity and reliability evidence is assessed by Magno (2010) with the Filipino college students who answered all of the items in the A-SRL-S. Internal consistency, person, and item reliability were obtained and thus revealed very high consistencies from its responses as shown in Table 2. Furthermore, the convergent validity evidence is obtained and established through significant intercorrelations of the factor scores administered to a sample of 2052 Filipino college students (Magno, 2010).

Table 1. Internal Consistency and Reliability Values of Academic Self-Regulated Learning Subscales

Subscale	Number of Items	Cronbach's alpha reliability coefficient	Person reliability	Item reliability
Memory Strategy	14	.82	.80	.99
Goal Setting	5	.76	.76	.89
Self-Evaluation	12	.81	.81	.98
Seeking Assistance	8	.66	.66	.98
Environmental Structuring	5	.65	.65	.97
Learning Responsibility	5	.67	.67	.97
Planning and Organizing	6	.61	.61	.83

Data Collection and Procedure

This study aimed to determine the significant relationship between the academic achievement of the first-year students of Colegio de San Juan de Letran - Manila and their motivation and self-regulated learning. It also aimed to determine whether the two variables significantly predict the students' academic achievement as indicated by their GWA. The process in gathering the data in this study was described in the following steps: (1) the researchers created an online survey questionnaire approved by their Psychological Statistics professor, (2) the researchers sought permission from the participants regarding the study, (3) the researchers sought consent and explained the implications of their participation before answering the questionnaires through an informed consent form, and (4) the survey form was made in Google Forms and was distributed through the Facebook group of the first-year students.

Ethical Considerations

Before proceeding to the actual process of data gathering, the researchers made sure that the instruments were approved by both of their professors in Psychological Statistics and Developmental Psychology. Afterwards, the online survey questionnaire made on Google Forms was approved and the purpose of the research was stated through the informed consent of the survey form before asking for the students' consent to participate. Inclusion criteria was also mentioned and given emphasis since the study involves the participants' GWA in the first semester of the A.Y. 2020-2021—a personal and confidential school information that a student must willingly share through self-report. Additionally, the responses and identities of the participants were assured of confidentiality and anonymity throughout the entire conduct of the data collection.

Statistical Analysis

All of the quantitative data obtained from the survey questionnaire was coded for statistical analysis using JASP 0.14.1. Data cleaning and management were done to ensure that there are no outliers or inappropriate entries which may tarnish the results of the study. In the method of data analysis, descriptive statistics (i.e., frequencies, mean, standard deviation) were employed to describe, summarize, and present information (i.e., age, gender, program, GWA) of the participants together with their academic motivation and academic self-regulated learning scores. Moreover, inferential statistics were employed to test each of the following null hypotheses of the study:

H_{01}: There is no significant relationship between academic motivation and the academic achievement of first-year students in Letran Manila. (Pearson correlation analysis was used as the statistical test)

H_{02}: There is no significant relationship between academic self-regulated learning and the academic achievement of first-year students in Letran Manila. (Pearson correlation analysis was used as the statistical test)

H_{03}: Academic motivation and academic self-regulated learning do not significantly predict academic achievement of first-year students in Letran Manila. (Multiple regression analysis was used as the statistical test)

RESULTS

The results of this study were presented in accordance with its objectives by presenting the descriptive and inferential statistics for each objective given.

Results of the descriptive statistics were presented in Table 3 where the participants' academic motivation scores, academic self-regulated learning scores, and academic achievement through their general weighted average (GWA) in the first semester of the Academic Year 2020-2021 on Colegio de San Juan de Letran – Manila were analyzed. Table 3 reports the difference in the means of the academic motivation scores (M = 6.19, SD = 3.42), academic self-regulated learning scores (M = 166.16, SD = 17.34), and the GWA (M = 91.76, SD = 2.17) of the 51 participants.

Table 3. Means and Standard Deviations of Academic Motivation, Academic Self-Regulated Learning, and Academic Achievement through GWA

	n	Mean	Standard Deviation
Academic Motivation	51	6.19	3.42
Academic Self-Regulated Learning	51	166.16	17.34
Academic Achievement (GWA)	51	91.76	2.17

In determining the relationship of the participants' academic motivation and academic self-regulated learning to their academic achievement, these null hypotheses were tested and put through a Pearson correlation analysis:

H01: There is no significant relationship between academic motivation and the academic achievement of first-year students in Letran Manila.

H02: There is no significant relationship between academic self-regulated learning and the academic achievement of first-year students in Letran Manila.

Table 4 shows the correlations between the academic motivation, academic self-regulated learning, and GWA of first-year students in Letran Manila. There was a weak positive relationship between academic motivation and academic achievement (r = .112, p = n.s.). Likewise, there was a weak positive relationship between academic self-regulated learning and academic achievement (r = .169, p = n.s.). By the strength of these correlations, it can be inferred that this statistical evidence was sufficient to claim that both academic motivation and academic self-regulated learning do not have a significant relationship with the academic achievement of the participants.

Table 4. Correlations between Academic Motivation, Academic Self-Regulated Learning, and Academic Achievement through GWA

Variable	1	2	3
1. Academic Motivation	—		
2. Academic Self-Regulated Learning	.152	—	
3. Academic Achievement (GWA)	.112	.169	—

This research was conducted to determine if academic motivation and academic self-regulated learning significantly predict the academic achievement of first-year students in Letran Manila. It is hypothesized that the two predictor variables are positively associated with academic achievement, which is represented by the GWA. To test this hypothesis, multiple regression analysis is used.

Table 5. Analysis of Variance (ANOVA) for the Prediction of Academic Motivation and Self-Regulated Learning in Academic Achievement

Source of Variation	*SS*	*df*	*MS*	*F*	*p*
Between Groups	8.53	2	4.27	0.901*	0.41
Within Groups	227.28	48	4.74		
Total	235.81	50			

*F_{crit} = 3.19. Therefore, accept *Ho*.

Table 6. *Multiple Regression Analysis with Academic Achievement (GWA) as the Outcome Variable*

	GWA of First-Year Students in Letran Manila			
Variable	***B***	***SE***	***t***	***p***
Academic motivation	0.056	0.091	0.615	0.542
Academic self-regulated learning	0.020	0.018	1.086	0.283

Note. R = .190, R^2 = .036, Adjusted R^2 = -.004

Statistical results presented in Tables 5 and 6 show insufficient evidence to support academic motivation and academic self-regulated learning as significant predictors of academic achievement, F(2,48) = 0.901, p = n.s., as there is a weak positive relationship between the variables, collectively, r(48) = .19, p = n.s.. Thus, both academic motivation (B = 0.071, p = n.s.) and academic self-regulated learning (B = 0.021, p = n.s.) did not significantly predict the academic achievement of the participants. Nevertheless, total academic motivation and self-regulated learning scores together only explain 3.6% of the variance in GWA that can be accounted for by the two given variables, with adjusted R2 = -0.4%. The overall results of the study suggest that both academic

motivation and academic self-regulated learning are not significant predictors of academic achievement.

DISCUSSION

The primary objective of this study was to determine whether there is a significant relationship between the academic achievement of the first-year students and their academic motivation and academic self-regulated learning. It also sought to investigate whether the two variables significantly predict students' academic achievement as indicated by their GWA. The researchers found that the relationship between the two variables bear no significant relationship due to its positive yet weak correlation which cannot be statistically considered. In light of the latter, the resulting correlation between academic self-regulated learning and the academic achievement of students also shows the same weak positive relationship leading the researchers to accept both the null hypotheses for the correlational aspects of the study. In the usage of multiple regression analysis to determine whether the predictor variables can significantly predict the students' academic achievement, the results show that it cannot significantly do so in accordance with the produced values from the hypothesis testing. The researchers were led to accept the null hypothesis for the multiple regression analysis, therefore stating that academic motivation and academic self-regulated learning do not significantly predict academic achievement of first-year students in Letran Manila.

The current findings of the study are in line with an early study done by Eom, Ashill, & Wen (2006) when discussing the significant relationship between academic motivation and perceived learning outcomes. It was indicated in their study that factors such as intrinsic motivation and extrinsic motivation played no role in the student's learning outcomes when doing their schoolwork. In an updated finding, Eom (2011) stated that by applying Zimmerman's view of self-regulated learning to their study now affirms that motivation has a direct, positive, and significant effect on the students' academic performance and achievement. For this study, Eom used the Partial Least Squares (PLS) Model in order to see the relationship between intrinsic motivation and extrinsic motivation in the student's academic performance. With this model being used for their study, Eom stated that between the two variables, the intrinsic motivation played a significant role in self-regulated learning compared to the extrinsic motivation, wherein it shows that it had no significant relationship with the learning outcomes.

Contradictory findings are shared by numerous studies and previous literature due to the common nature of the variables to correlate with one another. A study by Amrai et al. (2011) contradicts the findings of the present study as it explores similar variables wherein the past study determined the relationship between academic motivation and the academic achievement of students in the Tehran University. However, the study reported a statistically significant relationship between the two variables that led Amrai (2011) to reject their null hypothesis. The quantitative design of the study used a correlational approach in testing their hypothesis, took the participation of 352 students, and used Pearson's r correlation coefficient as their test of statistics. From the population cited in the study of Amrai et al. (2011), the contradiction on the number of respondents is evident, which poses a contributing factor to the conflicting results of the two studies.

In contrast to the present study, a research by Mahmoodi, Kalantari & Rozhin (2014) explored the self-regulatory learning strategies used by their respondents who are 130 EFL students in Iran. They also established the relationship between motivation and self-regulated learning, and the relationship between self-regulated learning and academic achievement. Findings of their study concluded that there is indeed a positive significant relationship between the variables of academic motivation and the self-regulated learning of students, while the relationship between the latter and achievement was considerably weak yet still worth noting to be statistically significant. It can be drawn from the findings of Mahmoodi, Kalantari & Rozhin's (2014) that the given variables they used in their research (academic motivation, academic self-regulated learning, and academic achievement) posed a connection from one another in the context of their respondents in Iran, which do not align with the locale of the current study. Although motivation and self-regulated learning can be widely seen as a hand-in-hand mechanism to improve achievement, no significant relationship was found at least in the contexts of the present study. This could be explained by the extent of different learning strategies favored by the participants to incorporate in their education, and the processes that mediate between their personal and environmental characteristics.

This study had several notable limitations which affected the findings of the research. As mentioned, a major factor for all the related literature was its sample size. For the current

study, only 51 first-year students of Letran Manila signed up to participate in the study, which is relatively small in comparison to the mentioned contradicting studies that resulted in statistically significant results. This limitation is acknowledged with its connection with the time constraint of the schedule of the researchers, challenging online learning set-up, as well as the inclusion criteria that required them to share their GWA, in which they may feel opposed to giving that information. Another limitation was that only first-year students could participate in the survey, indicating that the findings may not be representative of the whole population of the students in Letran Manila and thus suffered from limited generalizability.

CONCLUSION

Quality education is a crucial factor which heavily contributes to the success of an individual over the course of their lives. The difference between students in academic success can be observed evidently through their academic performance as a result of academic motivation and self-regulated learning strategies. In the present study of academic motivation, academic self-regulated learning, and academic achievement of college students, the researchers aimed to determine the predictive weight of the two independent variables on the academic achievement of first-year college students. Determining the significant relationships and a probable regression equation between the variables open avenues for this study to contribute to societal research in matters of Psychology and other disciplines which may further improve existing data and research with the same rationales. Specifically, this study can be of considerable contribution to the field of Developmental Psychology, with the variables having an involvement on Self-Determination Theory by Deci and Ryan (1985), and Social Cognitive Theory of Self-Regulation by Bandura (1986) that guide researchers to study about the psychological factors that may contribute to the academic achievement of learners, particularly in higher education.

The results of the study presented evidence with reference to the hypothesized relationship among the research variables. The two predictors were found to have a nonsignificant relationship with students' academic achievement. These variables were analyzed as a whole and have not taken into consideration the individual domains within academic motivation and strategies within self-regulated learning that could possibly explain their influence on academic achievement. Nonetheless, several external factors may contribute to the overall findings of the study that include challenging online classroom set-up and distance learning. Mutua (2014) highlighted the importance of collaborative learning, peer learning, and seeking constructive help in their similar study, in which both academic motivation and academic self-regulated learning significantly predict the academic achievement of Kenyan public secondary students. As such, the students' desire and satisfaction in learning may be affected by the current disruption of education and worldwide closing of schools in this academic year. It can be highlighted from Mutua that results greatly vary depending on the environment the student is in, wherein their study is on a traditional learning set-up and this study is under the 'new normal', presenting an evident difference on the setting of both studies.

In addition, the polarization of the students' GWA and scores from the research instruments has been evaluated as a factor for the lack of significant prediction of academic achievement by the predictor variables. Cetin (2015) highlighted this similarity in their study, in which they also determined possible psychological factors (i.e., intelligence, reasoning skills, academic attitude) that might affect the prediction of academic achievement of college students. Since motivation has an established direct effect on achievement, it is necessary to delve into extrinsic factors that might support intrinsic motivation, as stated by Eom (2015) in their study that highlighted these divisions and produced positive significant effect on achievement.

The key findings present answers to the laid-out research questions of the study: (1) there was an insufficient evidence for establishing a significant relationship between academic motivation and academic achievement, (2) there was an insufficient evidence for establishing a significant relationship between academic self-regulated learning and academic achievement, and (3) the academic achievement of a student cannot be significantly predicted through their level of academic motivation and academic self-regulated learning. Since the researchers accept the null hypotheses, the final conclusion of the correlational predictive study is that there is no significant relationship between academic motivation, academic self-regulated learning, and the academic achievement of first-year students in Letran Manila.

RECOMMENDATION

One of the notable limitations of this study is its limited sample size, with only 51 first-year students signed up as participants. Therefore, as a recommendation, future researchers that plan to further improve the study should seek a larger number of respondents. With a wider range of participants, it could reduce the probability of having biased groups. It can also provide more accurate statistical values by identifying the outliers to provide a smaller margin of error to the research.

Since the setting takes place in the Philippines and the A-SRL-S utilized for this study is developed by a Filipino researcher, a development and utilization of a local scale for academic motivation must also be considered. This should take into consideration the extrinsic factors such as the learning set-up, mode of education, social and cultural context, and other components that can affect the ability of the student to learn to a great extent. In addition, it is recommended for future studies that all strategy-use components of students are considered such as the cognitive and metacognitive strategies. Future researchers must explore and investigate all domains of motivational constructs such as intrinsic and extrinsic motivation, self-efficacy, and grade motivation to produce a deeper understanding and substantial findings with reference to the study.

The study focused on only one avenue as an indicator of academic achievement, which is the GWA of the students. Future researchers can explore standardized test results as a significant criterion instead of GWA as it may provide different results from the participants. All things considered, the opportunity remains wide open for the future researchers to develop an accurate model of prediction that best explains the most appropriate predictor of academic achievement in a Philippine school setting.

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