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An Assessment of Students' Self-Regulated Learning of a Higher Education Institution in a Highly Urbanized City in the Philippines

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ABSTRACT

Nowadays, learners have found various ways to learn individually through available technologies. Moreover, with the pandemic where flexible learning was implemented and a modular approach was utilized, the students had a hard time taking the initiative to study independently and setting goals in their academic endeavors. Students cannot manage the information they get; they have difficulties critically analyzing the important information they need. Thus, they should be properly guided on self-regulated learning since the curricula nowadays are student-centered. The study aimed to assess the self-regulated learning level of the 2nd-4th year students of the Pamantasan ng Lungsod ng Pasig in terms of planning, monitoring, controlling or adjusting, and reflecting. The study adopted the descriptive method with 2,302 respondents from the five colleges. Based on the findings, the students have a moderate level of self-regulated learning. Moreover, there is a significant difference in the self-regulated learning of the students when grouped according to their sex, age, college level, program, units

enrolled, and weekly allowance. However, there is no significant difference in their self-regulated learning according to their academic status and scholarship. In addition, there is a significant relationship between the self-regulated learning level and academic performance of the student-respondents of PLPasig. It is recommended that students must be exposed to more complex, open-ended tasks that will make them practice managing distractions and maintaining focus while tackling increasingly challenging academic work.

Keywords **—** Education, self-regulated learning, descriptive method, Pasig City-Philippines

INTRODUCTION

Students are considered an essential asset of any educational institution. The student's performance, specifically their academic achievement, plays an important role in producing the best quality graduates who will become great leaders and human resources for the country. Thus, they are responsible for economic and social development (Ali et al., 2009). This study provides the school management with empirical evidence related to designing relevant curricula and academic activities toward very satisfactory students' academic performance. Nowadays, learners have been finding various ways to learn through existing technologies. However, it is also observed that students cannot manage the information they are getting from the different websites on the Internet; they are having difficulties critically analyzing the important information they need for their school projects, assignments, and researches. With the Covid-19 pandemic, flexible learning was utilized, where a modular approach was implemented among the public schools here in the Philippines, making learners experience deficiencies in the learning process since they were left to study and understand the lessons on their own. This became the dilemma of the educational sector since the basic skills that should be developed among the learners were affected due to their lack of capability to study on their own and due to lack of initiative to set learning goals and then monitor, adjust, and evaluate their cognition, motivation, emotion, and behavior to achieve them. Thus, they should be properly guided on self-regulated learning since the curricula nowadays are student-centered. They are given a series of exercises and activities to accomplish individually. But without the proper skills in self-regulation, they will be challenged to adapt to these academic rigors.

In education and learning, self-regulation refers to a student applying self-directed processes and behaviors that lead to attaining goals. Self-regulation of learning encompasses creating a plan, selecting learning strategies, monitoring progress, and making adjustments as needed (Research Collaboration, 2015). Self-regulation is purposefully managing thoughts, behaviors, and emotions to acquire information or skills. Zimmerman (2000) states, "self-regulation refers to self-generated thoughts, feelings, and behaviors that are oriented to attaining goals." Da Silva (n.d.) expounded that self-regulation requires forethought and involves monitoring and reflection on performance. Hosova and Duchovicova (2019) presented that self-regulation is the ability to control and manage oneself. It can be described as the capacity to tell oneself what to do and what not to do. Self-regulation is learned from early childhood and is also one of the main objectives of education. This process consists of guidance, the ability to self-control, and setting own limits concerning others. The self-regulation process could be interpreted as making a plan, monitoring that plan, making changes to stay on track, and reflecting on what worked and could be improved the next time. The self-control, confidence, and knowledge gained from self-regulation give students the perseverance and skill to fruitfully navigate their studies and careers. Implementing self-regulation improves students' organizational ability and builds healthy work habits. The self-awareness and self-critiques used in self-regulation assist students in staying on track and continuing toward goals, working well with others, and adapting to new situations.

Matitaputty and Primana (2020) conducted a study on underachieved college students. For them, underachievement describes a situation when someone does not achieve their full potential. It has been considered a substantial problem in education and has been investigated for decades. In college, underachievement occurs because students are either unprepared or do not meet the expected standards. Cukbucu (2009, as cited by Matitaputty and Primana 2020), believed that the major cause of learning failure is the lack of self-regulation. In terms of self-regulatory processes, underachievers are more impulsive, set lower academic goals, monitor their learning less accurately, are more self-critical and less self-efficacious, and tend to give up more easily than achievers (Borkowski & Thorpe, 1994, as cited in Zimmerman & Risemberg, 1997). The study found that the cause of underachievement is a lack of self-regulated learning skills. The researchers designed an intervention program based on the self-regulated learning theory to overcome underachievement. The program focuses on improving self-regulated learning ability by equipping participants with goal-setting and

time-management skills, increasing motivation, and promoting control and motivation. Results showed that the self-regulated learning ability score increases from average to good, whereas the external locus of control score decreases from high to low. Conversely, the internal locus of control score is increasing from the average to the high category. However, no differences were observed between self-motivation scores at post-intervention.

The study aimed to assess the self-regulated learning level of the second to fourth-year students of the Pamantasan ng Lungsod ng Pasig in terms of planning, monitoring, controlling or adjusting, and reflecting and utilizing its findings in designing an intervention program for the students, highlighting the enhancement of their self-regulated learning practices to easily cope with the demands of the school and, eventually, the workforce.

FRAMEWORK

Self-regulated learning is a self-directed process for learners to transform their mental abilities into academic skills. It is the process of helping students manage their thoughts, behaviors, and emotions to successfully direct their learning experience (An et al., 2021). Self-regulated learning is a cyclical process wherein the student plans for a task, monitors performance, and then reflects on the outcome. The cycle repeats as the student uses the reflection to adjust and prepare for the next task. The process is not one-size-fits-all; it should be tailored for individual students and specific learning tasks (Zimmerman, 2002). There are steps that the students perform, but the instructors play a vital role in guiding and coaching students through each step. Ludwig et al. (2020) made an illustration of this which is drawn from Zimmerman (2002) and Zumbrunn et al. (2011), where students plan to set goals and layout strategies; use strategies and monitor performance; reflect on performance; and use results from previous performance to guide the next one.

Various authors can mention different components of self-regulation, but generally, the principal components of self-regulation are (1) Planning, (2) Problem-Solving, and (3) Self-Evaluation. Zimmerman (2002) considers self-regulation as a cyclical process, and its components are divided into three phases: Performance (involving self-control and self-observation), Forethought (involving task analysis and self-motivation beliefs), and Self-Reflection (involving self-judgment and self-reaction). Suffice it to say that academically self-regulated learners are more engaged with tasks, better performers on tests,

and more confident. According to Blair (2002), students with academically self-regulated attitudes and behaviors can study or perform a challenging or repetitive school task, even when there is something else that they enjoy doing more.

OBJECTIVES OF THE STUDY

The main purpose of the study was to assess the self-regulated learning level of the second to fourth-year students of the Pamantasan ng Lungsod ng Pasig in terms of planning, monitoring, controlling or adjusting, and reflecting. Furthermore, this study sought to determine the profile of the student-respondents and their academic performance (GWA) for the 2nd Semester of AY 2020-2021. Moreover, the study also wanted to find out if there is a significant difference in the perceived self-regulated learning of the respondents in terms of the selected demographic profiles and if there is a significant relationship between the self-regulated learning level and academic performance of the respondents in their 2nd Semester AY 2020-2021.

METHODOLOGY

Research Design

To assess the self-regulated learning level of PLPasig's 2nd to 4th-year students, the researchers used the descriptive method of research, particularly the correlational research design, as it allows for scientific investigation to describe the current conditions and investigates relationships between variables without the researcher controlling or manipulating any of them. It describes the nature of a situation as it exists at the time of the study and explores the course of a particular phenomenon. Accurate observations and assessments from the data that ascertain the nature and incidence of prevailing conditions, practices, or descriptions of objects, processes, or persons, are all the objectives of descriptive research. A Likert-type of the survey questionnaire was used to gather information. Descriptive research examines current issues or problems by collecting data describing the sample population's characteristics and/or behavior. It can be justified by describing, explaining, and validating the research findings (Shuttleworth, 2008). In this study, the Researchers asked the students to answer the survey instrument, which comprises two parts.

Research Site

This study took place at the Pamantasan ng Lungsod ng Pasig in the First Semester of Academic Year 2021-2022. The 2nd to 4th-year students from the College of Business and Accountancy, College of Computer Studies, College of Education, College of Engineering, and College of Nursing were considered in this study. The decision to include the entire population in all programs is consistent with the desire of the researchers to establish explicitly the validity of this study.

Research Respondents

The Pamantasan ng Lungsod ng Pasig has 2,818 enrolled students for the 2nd to 4th- year level in the First Semester of the Academic Year 2021-2022 for the twelve programs. Out of the said population, 2,302, or 87.37%, became the respondents for this study. This study aimed to distribute the survey questionnaire to all the 2nd to 4th-year students in the said semester. However, the researchers could not get 100 percent of the total population as respondents due to unforeseen circumstances. This was due to the following reasons: non-submission of the survey instrument, leave of absence, withdrawal of enrolment, and unofficial dropping from the course of some of the respondents.

Research Instruments

The Researchers used a survey questionnaire as the primary data-gathering instrument in this study. The instrument was a researcher-made survey instrument by Gaumer Erickson et al. (2015). The Self-Regulation Questionnaire is designed to measure a student's proficiency in the four essential components of self-regulation, which are: **plan** – for what an individual wants to accomplish, **monitor** – progress and interference regarding one's goal, **control** – be able to change by implementing specific strategies when things are not going as planned and **reflect** – on what worked and what you can do better next time.

The first part deals with the Demographic Profile. The checklist elicits pertinent information about the 2nd to 4th-year students in terms of demographic variables such as their sex, age, college level, the program enrolled in, number of units enrolled in the current semester, student's academic status, weekly allowance, source of the allowance, scholarship, parents' occupation, monthly income of parents and/or working siblings, and number of children in the family. The second part is the self-regulated learning questionnaire. The instrument was subjected to validity (with CVI-CVR result of 1) and reliability

testing (with Cronbach alpha of .87) and yielded very satisfactory results leading to the conduct of the study. The informed consent of the respondents was also secured in the process.

Data Analysis

For the computation and analysis of the gathered data, SPSS Version 23 was used by the Researchers. Frequency and percentage were applied to obtain the computed data on the respondents' profiles as to the demographic variables like their sex, age, college level, the program enrolled in, number of units enrolled in the current semester, student's academic status, weekly allowance, source of the allowance, scholarship, parents' occupation, monthly income of parents and/or working siblings, and number of children in the family.

Frequency, percentage, and average mean were used to measure and determine the academic performance of the respondents during their 2nd Semester of the Academic Year 2020-2021.

Table 1

Grading Scale based on the Description in the Grade Report Card Utilized in the University

Grading Scale	Descriptor
95-100	Excellent
89-94	Very Good
83-88	Good
77-82	Satisfactory
75-76	Passed
Below 75	Failed

Weighted mean was utilized to compute the perception of the students regarding the four areas of their self-regulated learning. The Likert scale was used to determine the level of the students' self-regulated learning.

Table 2
Scale, Range, and Interpretation on the Level of the Students' Self-Regulated Learning

Scale	Range	Verbal Interpretation	
4	3.50 – 4.00	Always	High Self-Regulation
3	2.50 – 3.49	Often	Moderate Self-Regulation
2	1.50 – 2.49	Sometimes	Low Self-Regulation
1	1.00 – 1.49	Never	No Self-Regulation

Analysis of Variance (ANOVA) was employed to get the significant difference in the respondents' self-regulated learning level according to sex, age, college level, the program enrolled in, number of units enrolled in the current semester, student's academic status, weekly allowance, and scholarship. A T-test for correlation was used to measure the correlation between the assessment of self-regulated learning and the academic performance of the students.

Pearson Product-Moment Coefficient was also utilized to determine if there is a significant relationship between the level of self-regulated learning as assessed by the students and their 2nd Semester AY 2020-2021 grades.

Table 3
Scale to Determine the Relationship between the Two Variables

Scale	Description
±0.80 - ±1.00	High Positive/ Negative Correlation
±0.60 - ±0.79	Moderately High Positive/Negative Correlation
±0.40 - ±0.59	Moderate Positive/ Negative Correlation
±0.20 - ±0.39	Low Positive/ Negative Correlation
±0.01 - ±0.19	Negligible Positive/ Negative Correlation

RESULTS AND DISCUSSION

More than half (69.10%) of the respondents are female, while 30.90% are male. Some (34.14%) were 21 years old which was followed by 30.10% who were 20 years of age while 19.46% were 19 years old, 11.08% were 22 years old, 3.87% were 23 years old and above, .83% were 18 years old, and only 2 students were 17 years old and below. There were 36.71% of 3rd-year students. This was

followed by 4th-year students with 31.97% and 2nd-year students with 31.28% of the total population.

The BSBA program has 21.19% enrolled students from the total population of 2nd to 4th-year students in PLPasig. This was followed by students in the BSHM program with 17.98% and BSIT course with 16.33%. Another program from the College of Business and Administration, BSA got 10.17% enrolled students. Moreover, 7.60% enrolled students in the BS Entrepreneurship program and 5.39% in the Nursing course. As for the College of Education, there were 4.95% of the students from the BEED, 4.56% for BSED Major in Filipino; and 4.30% for BSED Major in English. The three courses with the smallest population were BSCS with 3.87%, BSECE with 2.35%, and BSED Major in Mathematics with 1.22%.

There 33.80% of the students have 22 to 27 units of courses enrolled in the semester. There were 29.89% who took 9 to 15 units, followed by 15.20% with 16 to 21 units, and 12.42% enrolled in 28 to 33 units. On the other hand, there were 5.95% of students with below 9 units and .48% with 34 units or more. There were 93.92% of the students in the University have a regular status, while there are 5.13% of them are irregular students.

Some (27.76%) PLPasig students have a weekly allowance of below 50 pesos. Also, there were 24.85% of them given a 51 to 100 pesos weekly allowance, while 13.38% received approximately 101 to 200 pesos weekly allowance. Around 12.95% of them have an allowance of 401 to 500 pesos. Most (66.38%) of the students' allowances came from the salary of their parents and/or working siblings. Some (19.90%) of students used their scholarship allowances for their school expenses to help their parents lessen their financial predicament. In comparison, 11.16% of the students got their allowance from their workers' salaries, as a few are working and studying simultaneously.

1,207 students had scholarship grants from various organizations or institutions, while 1,056 had none. And from the 1,207 students who had other scholarship grants, 1,101 were scholars of the Pasig City Government; 14 were supported by the Puregold Company, while 76 students had scholarship grants from different organizations, companies, and institutions.

Over half (60.25%) of the respondents' fathers are employed, while 32.97% are unemployed. As for their mothers, 68.20% are not working, while 27.32% are employed. For the nature of the fathers' occupation, 31.23% are employees from the private sector, while 22.76% are self-employed. Only 6.26% of them are working in the public sector. As for the respondents' mothers, 9.77% work in

the private sector, while 9.60% are self-employed. There are 7.95% of mothers connected in the public sector. Some (35.1%) respondents answered that their family has a joint monthly income of 5,000php to 10,000php. This was followed by 19.6% of those with less than 5,000php monthly income and 19.3% with monthly earnings of 10,001php to 15,000php. Some (26.8%) of the respondents replied that there are 3 children in their families, of which four children, with 21.5% followed. Moreover, 19% had families with two children, 10.9% with five children, and 7.4% with six children.

Table 4

Academic Performance (GWA) of the Student-Respondents for the 2nd Semester of the Academic Year 2020-2021

Grade Range	Frequency	Percentage	Interpretation
1.00 - 1.24	18	.8	Excellent
1.25 - 1.49	353	15.3	Very Good
1.50 - 1.74	872	37.9	
1.75 - 1.99	646	28.1	Good
2.00 - 2.24	195	8.5	
2.25 - 2.49	39	1.7	Satisfactory
2.50 - 2.74	18	.8	
2.75 - 2.99	9	.4	Pass
No Answer	152	6.6	
Total	2,302	100.0	
Average Mean Grade = 1.995 (Good)			

The PLPasig students had a Good academic performance for the Second Semester of the Academic Year 2020-2021 through their average mean grade of 1.995.

Table 5
Summary of the Level of Assessment of the Student-Respondents' Self-Regulated Learning

Components of Self-Regulation	Weighted Mean	Ranking	Verbal Interpretation
Planning	3.04	2.5	Moderate Self-Regulation
Monitoring	3.04	2.5	Moderate Self-Regulation
Controlling or Adjusting	2.89	4	Moderate Self-Regulation
Reflecting	3.07	1	Moderate Self-Regulation
Grand Weighted Mean	3.07	Moderate Self-Regulation	

The self-regulated learning, as perceived by the students was moderate in terms of reflecting with a weighted mean of 3.07. Furthermore, the components of planning and monitoring were perceived to be moderate by the students, and both garnered a weighted mean of 3.04. The controlling or adjusting component of the students' self-regulation gained a weighted mean of 2.89 which is interpreted as having a moderate level. Thus, the self-regulated learning of the 2nd to 4th year students was moderate as perceived by them with a grand weighted mean of 3.07.

The student-respondents were moderately self-regulated when they planned projects that they wanted to complete, when they considered all the things that they needed to get done before resorting to fun activities when they can usually estimate how much time their homework will take to be completed, and when they create a study plan if an important test is coming up. Furthermore, they were moderately self-regulated because they know when they are behind on a project, when they track their progress in reaching their goals, when they identify things they need to get done and track what was done daily, and when they keep track of how their projects are going. In addition, the student-respondents were moderately self-regulated since they do what it takes to get their homework done on time, they keep trying as many different possibilities as necessary to succeed, and when they see things are not going right, they want to do something about it. They feel a sense of accomplishment when they get everything done on time, try to learn from their mistakes if they fail at something, and think about how well they have done in the past when they set new goals.

There is a significant difference in the perceived self-regulated learning of student-respondents according to their sex (0.115), age (0.000), college level (0.087), program enrolled in (0.000), number of units enrolled in the semester (0.000), and weekly allowance received from their working parents/siblings (0.000). The computed p-values are less than the 0.05 significance level. The null hypothesis was rejected. However, there is no significant difference in the student respondents' perceived self-regulated learning according to their academic status (0.884) and scholarship (0.1553). The computed p-values are greater than the 0.05 significance level. The null hypothesis was accepted.

Table 6

Significant Relationship between the Self-Regulated Learning Level and Academic Performance of the Student-Respondents

Variables	Computed r	Interpretation	P-value	Decision	Remarks
Self-Regulated Learning and Academic Performance	.050	Negligible Positive Correlation	.020	Reject Ho	With Significant Relationship

The computed r of .050 was used to determine the degree of relationship between the assessed level of self-regulated learning and academic performance, identified as having a negligible positive correlation. The p-value of **.**020 is lesser than the level of significance, which is 0.05. Thus, the hypothesis that there is no significant relationship between the self-regulated learning level and academic performance of the 2nd to 4th year student-respondents of PLPasig is "Rejected." Zimmerman and Pons (1986) state, "Research on the quality and quantity of students' use of the self-regulatory process has revealed high correlations with academic achievement track placement as well as with performance on standardized test scores." In this case, the correlations of the use of self-regulatory with academic achievements have to deal especially with self-motivation, where the academic achievements take place as the goals. Academic achievement is positively related to self-regulated learning, particularly meta-cognitive regulating behaviors like monitoring and planning (Yu, 2023). In addition, a good SRL ability also benefits second language learners' online learning (Dent & Koenka, 2016).

CONCLUSIONS

The PLPasig students had a Good academic performance for the Second Semester of the Academic Year 2020-2021 although it utilized the flexible learning modality due to the pandemic. The 2nd to 4th year students of PLPasig have a moderate level of self-regulated learning in the four aspects. However, they have low self-regulation when making plans to help them reach their goals, even in remembering all the things they need to accomplish and they keep making mistakes in the process. This only means that they still have to improve their self-regulated learning practices for them to be able to cope with the challenges of their studies. If the students have high self-regulated learning levels, it is also possible for them to get very satisfactory to excellent academic performance.

TRANSLATIONAL RESEARCH

With the results of the study, the academe has provided common instructional practices based on the nature and needs of the colleges in helping students learn self-regulation, such as guiding the learners to develop self-beliefs, goal setting, and expectations; promoting reflective dialogue; providing corrective feedback; and helping learners make connections between abstract concepts and link new experiences to prior learning. Year-level advisers were assigned to monitor the students in their advisory classes. Moreover, the colleges have provided a study environment conducive to focus, as a relatively quiet space for individual work is invaluable through the designated study halls and state-of-the-art library facilities. Students were exposed to different kinds of activities in their various courses/subjects that enhance self-regulated learning, such as think-pair-share; retrieval practice; sorting, chunking, and organizing information; reading reflections; exam wrappers; and other meta-cognitive exercises. Students were able to proactively evaluate and improve upon their learning. Activities were sustained through regular practices, increasing in duration for each session. Faculty members designed performance tasks that are more complex and open-ended, which allowed them to practice managing distractions and maintaining focus while tackling increasingly challenging academic work.

Faculty members continuously teach students self-regulation strategies effectively by motivating them to develop their self-determination and ability to disengage, initiate, and persist. Moreover, the faculty members have improved their teaching skills by teaching content and self-regulation strategies. At this

point, the faculty members still guide and remind the students that despite their socio-economic status, they should still have the drive and determination to perform well in school.

LITERATURE CITED

Ali, N., Jusof, K., Ali, S., Mokhtar, N., & Salamat, A. S. A. (2009). THE FACTORS INFLUENCING STUDENTS'PERFORMANCE AT UNIVERSITI TEKNOLOGI MARA KEDAH, MALAYSIA. *Management Science and Engineering*, *3*(4), 81-90.

An, Z., Wang, C., Li, S., Gan, Z., & Li, H. (2021). Technology-assisted self-regulated English language learning: Associations with English language self-efficacy, English enjoyment, and learning outcomes. *Frontiers in psychology*, *11*, 558466.

Blair, C. (2002). School readiness: Integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry. *American psychologist*, *57*(2), 111.

Da Silva, G. C. (n.d.). Self-Regulation: Efficient practice and results among college students. Ball State University. https://bit.ly/3AUVoTF

Dent, A. L., & Koenka, A. C. (2016). The relation between self-regulated learning and academic achievement across childhood and adolescence: A meta-analysis. *Educational Psychology Review*, *28*, 425-474.

Gaumer Erickson, A. S., Soukup, J. H., Noonan, P. M., & McGurn, L. (2016). Self-efficacy questionnaire. *University of Kansas, Center for Research on Learning, Lawrence, KS, available at: http://researchcollaboration. org/uploads/ Self-EfficacyQuestionnaire. pdf*.

Hosova, D., & Duchovicova, J. (2019, March). Self-Regulation of Pedagogy Students. In *Conference Proceedings. New Perspectives in Science Education 2019*.

Ludwig, V. U., Brown, K. W., & Brewer, J. A. (2020). Self-regulation without force: Can awareness leverage reward to drive behavior change?. *Perspectives on Psychological Science*, *15*(6), 1382-1399.

Matitaputty, E. K. N., & Primana, L. (2020, November). Self-Regulated Learning Intervention Program for Underachieving College Students. In *3rd International Conference on Intervention and Applied Psychology (ICIAP 2019) and the 4th Universitas Indonesia Psychology Symposium for Undergraduate Research (UIPSUR 2019)* (pp. 341-350). Atlantis Press.

Shuttleworth, M. (2008). Descriptive research design-Observing a phenomenon. *url: http://explorable. com/descriptive-research-design, date retrieved: February*, *10*, 2013.

Yu, B. (2022). Self-regulated learning: A key factor in the effectiveness of online learning for second language learners. *Frontiers in Psychology*, *13*.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into practice*, *41*(2), 64-70.

Zimmerman, B. J., & Pons, M. M. (1986). Development of a structured interview for assessing student use of self-regulated learning strategies. *American educational research journal*, *23*(4), 614-628.

Zimmerman, B. J., & Risemberg, R. (1997). Self-regulatory dimensions of academic learning and motivation. In *Handbook of academic learning* (pp. 105-125). Academic Press.

Zumbrunn, S., Tadlock, J., & Roberts, E. D. (2011). Encourage self-regulated learning in the classroom.