Study Habits of Secondary Students from A Philippine City Schools Division during Distance Learning

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ABSTRACT

Study habits is presumed to be a promising indicator as regards the scholastic standing and academic success of students. However, with the unforeseen paradigm shifts in the Philippine education system due to COVID-19, millions of Filipino learners are confronted with various school-related concerns. Their established study habits are undoubtedly disrupted, if not yet depleted. This led the researchers to instigate this research and gather the data pertinent to the attainment of its general objective. In total, there were 4,056 secondary students from nine junior and senior high schools who voluntarily participated in the conduct of this study. With the intention of this quantitative research to gauge the degree of study habits of the respondents, and its potential significance of differences when grouped according to an identified set of independent variables, a set of statistical tools were espoused. For the results, the respondents accumulated an overall mean of 4.14 or often, which implies positive academic practice given its frequent recurrence. Hereafter, t-test and ANOVA statistics also declared that their study habits are significantly different when the mean scores are juxtaposed according to sex (p-value = 2.536E-12 < 0.05), socio-economic status (p-value = 0.03 < 0.05), education level (p-value = 0.02 < 0.05), and preferred modality of learning delivery (p-value = 0.02 < 0.05). This infers that the disparities in the study habits of secondary students are exceedingly distinguishable when clustered as per their demographic information and chosen instructional channel—inclined to the rejection of the null hypotheses.

Keywords: COVID-19, modular, online learning, quantitative, parametric

Received: 19 July 2021; Accepted: 22 February 2022; Published: 29 July 2022


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INTRODUCTION

A profusion of literature anchored towards the interplay of academic performance and study habits can be considered as a basis for the improvement of institutional policies. In earlier studies, local researchers have ascertained that a positive relationship between study habits and academic performance exists, more so, having consistent study habits is a prerequisite to good academic performance (Salcedo-Relucio, 2019). Study habits, as explicited by Ćređe and Kuncel (in Kaur & Singh, 2020), are the procedures, standards, or routines that students are consistently following in their years in school. There are students who have adapted a certain routine or pattern when they study, such as being at a particular place or corner of the house, and establishing patterns like reading, reviewing, or writing notes and all these are done outside class hours (Mendezabal, 2013). The ideology and practices behind study habits are believed to be measured in multiple ways. To mention as an example is the Philippine-based correlational study of Magulod Jr. (2019), which found that the Filipino university students, who took part as research respondents, manifested a moderate level of study habits and skills based on the Reid’s Perceptual Learning Style Preference Questionnaire. Meanwhile, there are other works that adopted other survey tools that can quantify the study habits of students, such as the Survey of Study Habits and Attitudes (SSHA) of Brown and Holtzman in the research of Aquino (2011), the Study Skills Inventory (SSI) of Congos in Numan and Hasan (2017), the Students’ Study Habits Assessment Scale (SSHAS) of Charles-Ogan and Alamina in Capuno et al. (2019), and finally, the Study Habits Inventory (SHI) of Patel in Nair and Kulkarni (2020).

If one is to scrutinise, the majority, if not all, of these research instruments were used when face-to-face classes were still being held. Thus, conducting an inquiry on the study habits of students in a pre-pandemic context must be tantamount to the importance of investigating the topic in the time of COVID-19, when this health outbreak is already considered to be a national and global concern. As Harris (in Peker Ünal, 2021) penned it, students under distance education are more immersed now in a web-based learning environment. Therefore, perceiving the study habits of students as incessant is paradoxical. Likewise, being isolated in a distance learning environment, “every student may have to develop new study habits while adapting to the change in order to still perform academically well” (Gonzalo et al., 2021, p. 17). As one of the numerous distance learning delivery modalities, online learning has become the mandatory component of all educational institutions, not only in the Philippines, but worldwide. According to Radha et al. (2020), online distance learning has become the solution for most students to continue their schooling amidst the pandemic, since people choose to learn at the comfort of their home and the convenience attached to it. Regrettably, this may not be similar nor applicable for all students in a developing country like the Philippines where internet connectivity is unstable and technological resources are bounded due to high demands and costs.

Alongside these scholarly articles on study habits and distance learning, there are some foreign studies and other local researches that presented both macro and micro-analyses probing not just the study routines of the students, but so as their demographic profiles,
such as sex, age and socio-economic status. To cite a few of the major findings, it was concluded in the study of Blumner and Richards (in Amuda & Ali, 2018) that female students perform better in terms of their study routines and practices than their opposite sex. This is further concurred by Numan and Hasan (2017), whereas, majority of their respondents are female who recorded higher mean scores than male students, and the difference between the mean scores of both sexes is noticeably significant with a $p$-value less than the 0.05 significance level. In relation to age, Ossai (2012) investigated the study habits of secondary students according to two age groups: those whose age fell between 12 to 15 years old and those who were in the range of 16 to 19 years old. It was found that there was a significant difference in the data, since older secondary students have better study habits than the younger respondents. In terms of study habits and socio-economic status, Razia (2015) mentioned in their completed article the indication of significant differences in the study habits of secondary students from varied income groups, such as high, middle, and low socio-economic statuses. If students come from financially-struggling families, the lower the chance that they would be able to invest greatly in establishing consistent study routines and practices. This cause-and-effect situation is also discussed in the Philippine-based findings of Salcedo-Relucio (2019) focusing on the factors influencing the study habits of eleventh grade students. But to reiterate, these findings were written before the pandemic, which is a scenario that is from what academic institutions and students are currently encountering.

On account of the unprecedented series of natural disasters that range from typhoons to volcanic eruptions, and the global plague that citizens across international borders are experiencing due to COVID-19, there have been changes in the instructional delivery of schools and learning modality of students. In fact, there is an estimate of 1.6 billion learners in more than 200 countries who have been affected by the disruption brought about by the pandemic alone (Pokhrel & Chhetri, 2021). Notwithstanding these statistics, the data of the Department of Education (DepEd in Hernando-Malipot, 2020) disclosed that despite the pandemic drastically changing the lives of people, the school year 2020–2021 still received 25.03 million enrollees both in public and private schools in the Philippines. With the Basic Education Learning Continuity Plan enacted through DepEd Order 12, Filipino students in the Basic Education Department can be admitted in distance learning modalities, which include modular and online learning, augmented by tv/radio-based learning (DepEd, 2020a). Modular distance learning utilises printed or digitalised self-learning modules (SLMs) and localised learning activity sheets (LAS) that were prepared by teachers. Accomplished SLMs and LAS will be the required outputs in order for the students to finish one academic year. On the other hand, as also articulated in the previously mentioned memorandum order, online distance learning highlights the use of different technologies powered by the internet while teachers and students are remote from each other during synchronous or asynchronous activities, such as Learning Management System, Google Classroom, and the like.

With these distance learning modalities cum major paradigm shifts in the entire education system, students were obliged to adjust their learning habits due to the abrupt closures
of schools (Benkhider & Kherbachi, 2020). Looking back, the analysis of this literature is one of those that stirred the motivation for the conduct of this present study. With the new learning delivery modalities, this research undertaking quantified the study habits of secondary students, and more importantly, this probed the specific domains that are considered to be their area of enrichment or improvement. As revealed and expounded in the studies cited above, study habits could be measured in numerous ways. Nonetheless, due to its suitability and contextualisation on the key constructs of the understudied variable, the researchers of this current study opted to use the five domains of study habits elucidated in the work of Salva (2020), which amassed motivation from the adapted questionnaire of Lucas and Corpuz (2014). These domains are wholly incorporated in a survey that encompasses concepts related to measurable goals, metacognitive awareness, academic requirements, test preparation and test taking, and time and stress management.

Setting measurable goals is clearly top of mind when it comes to studying. Goal setting is a process where an individual institutes a route for learning (Marzano et al. in Dotson, 2016). This implies that for each learning activity, it is important to formulate at least a goal to see the direction of any academic undertaking. Becton (in Lucky & Saidu, 2020) agreed to this by including the need to set a particular goal for every study time as one of the strategies in manifesting good study habits. Knowing the essence of writing short and long-term plans in measurable behaviours can impact the educational achievement of a student. More so, this can implicate the rest of the domains of study habits, essentially the second construct, which is the development of metacognitive awareness. This domain entails helping students to self-analyse what they know, how they do things, what they care about, and developing awareness about themselves (Jaleel & Premachandran, 2016). It is an indispensable domain, considering that awareness of oneself can greatly aid the students in planning what works and what does not work for them. There have been studies that were written in the preceding years claiming the positive relationship of metacognitive awareness and study habits. Two of these are the researches that Khan and Rasheed (2018; 2019) have published. The latest paper concluded that the study habits of students can be enriched with the generous contribution of metacognitive strategies to their learning experiences. Furthermore, in the academe, students spend an exorbitant time working on academic requirements. These provide avenues for practice and acquisition of skills, and hence, schools offer course of actions for training and execution. As per preparing for and taking the test, this is perceived to be an inevitable part of being a student. In the Philippine context, formative and summative assessments are ways of evaluating student performance, and even amidst the pandemic, the national basic education agency of the country was able to specify the importance of these assessments through a continuity plan that was elaborated in a memorandum (DepEd, 2020). Therefore, students should make preparatory arrangements for such. These preparations may include independently handling the test content, directions, surveying questions before answering, managing time, and dealing with difficult questions. Additionally, allotting time to study lessons and having the urge to comply with tasks immediately can contribute to the foundation of study habits (Goud, 2018). Scheduling in advance an ample amount of time
to complete school requirements can not only help learners in fostering excellent academic performance, but it can even alleviate the potential stressors attached to overwhelming tasks and the act of cramming. Students should learn to manage time and school-related stressors in order for them to remain oriented on the goals they have set. Managing time is pivotal in the improvement of their academic performance (Nasrullah & Khan, 2015). Undeniably, time and school-related stressors are factors to recollect, and students should have a grasp of managing them well.

While it is true that a high volume of studies has been written and published in connection to study habits, it is still a topic that must be placed at the forefront of every institutional research agenda due to the fact that times have radically changed, and along with these changes are certain adaptive ways that students do at given situations, primarily during this pandemic. Aristeidou and Cross (2021) seconded this need to understand the changes in the study habits of the students due to the pandemic, so that impacts may be assessed. It is worthy to note that this research zeroes in on quantifying the study habits of junior and senior high school students and determining the significant differences of study habits when dichotomised according to sex, socio-economic status, education level, and learning delivery modality. Angkarini (2021) spells out that the study habits of students in the usual face-to-face classes need some adjustments in the present situation. Given the new educational setup, certain changes or adjustments in study habits are needed to be done. Since students are working independently in a remote form of education, their study habits will play a huge factor in their productivity.

RESEARCH QUESTIONS

With the general objective of the researchers to gauge the study habits of secondary students in the new normal of education, these specific questions were answered:

1. What is the overall degree of study habits of the respondents during distance learning?
2. Do the degrees of study habits of the respondents have significant differences when clustered according to the following demographic information: (a) sex; (b) socioeconomic status; and (c) education level?
3. Are the study habits of the respondents significantly different when grouped according to their preferred modality of learning delivery?

HYPOTHESES OF THE STUDY

The null hypotheses for this study suppose that there are insignificant differences between and among the total degrees of study habits of secondary students during distance learning, chiefly when categorised based on sex, socioeconomic status, education level, and chosen modality of learning delivery.
METHODOLOGY

This quantitative exploration involved junior and senior high school students from the City Schools Division of General Trias, a Philippine city schools division in the Province of Cavite. It has a total of 26,004 distance learners who are enrolled across nine secondary schools for the academic year 2020–2021. Whereas, 22,968 students are from junior high school and 3,036 are senior high school students. In choosing the respondents of the study, a non-probability sampling procedure was considered, specifically, the convenience sampling method. This allowed 4,056 students to voluntarily participate by answering the research instrument, given their availability and consent. These respondents are comprised of 3,189 and 867 junior and senior high school students, respectively; 2,472 who are online distance learners, while the remaining 1,584 are modular distance learners; 1,668 who are male and 2,388 are female; and a great number of the total sample came from the two lowest socioeconomic statuses, such as poor and low income, but not poor.

The researchers gathered the needed data using the Five-Domain Study Habits Questionnaire, a questionnaire that went through expert validation and reliability analysis. By means of Cronbach’s alpha test, a coefficient alpha score of 0.94 was achieved, indicating that the instrument is reasonably reliable. This 50-item research instrument quantifies the five different domains of study habits (Salva, 2020, p. 116):

1. Setting measurable goals.
2. Developing metacognitive awareness.
3. Working on academic requirements.
4. Preparing for and taking the test.
5. Managing time and school-related stressors.

The quoted key constructs are apt to assess the extent of study habits of secondary students in the absence of face-to-face classes, particularly in assessing their goal-setting and organisational skills, sense of urgency in accomplishing school tasks, note-taking skills, strategies when reviewing, self-awareness, cooperation, and even their coping mechanisms and self-reinforcement. To ascertain that the questionnaire will be comprehensively answered, the instrument was translated to the local language of the respondents. This aided the secondary students to better assess their academic routines and study practices amidst the pandemic.

To reckon the study habits of the respondents, descriptive and inferential statistics were adopted. For the descriptive statistical tools, mean was utilised in obtaining the central tendency or the average degrees of study habits that are necessary to answer all the research questions. Additionally, ranking and Likert Scale were used in the first research question to identify the strongest and weakest domain of study habits of the respondents. The range for the Likert Scale and its corresponding verbal interpretations are provided below:
With reference to the inferential statistics that examined the mean scores between two groups, such as sex, education level, and preferred modality of learning delivery, one-tailed independent samples $t$-test was applied. Furthermore, one-way analysis of variance (ANOVA) was employed to the findings as per the socio-economic status of the respondents, which has more than two groups. Both parametric tests validated or nullified the significance of differences that were computed for second and third research questions. Taking into account these aforementioned tools, the researchers of this study were able to generate data-driven analyses and logically-produced conclusions.

RESULTS AND DISCUSSION

Research Question 1. What is the overall degree of study habits of the respondents during distance learning?

Table 1. Study habits of secondary students during distance learning

<table>
<thead>
<tr>
<th>Domains of study habits</th>
<th>Mean</th>
<th>Verbal interpretation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Setting measurable goals</td>
<td>4.09</td>
<td>Often</td>
<td>4</td>
</tr>
<tr>
<td>b. Developing metacognitive awareness</td>
<td>4.02</td>
<td>Often</td>
<td>5</td>
</tr>
<tr>
<td>c. Working on academic requirements</td>
<td>4.24</td>
<td>Always</td>
<td>1</td>
</tr>
<tr>
<td>d. Preparing for and taking the test</td>
<td>4.16</td>
<td>Often</td>
<td>3</td>
</tr>
<tr>
<td>e. Managing time and school-related stressors</td>
<td>4.17</td>
<td>Often</td>
<td>2</td>
</tr>
<tr>
<td>Total Mean</td>
<td>4.14</td>
<td>Often</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 presents that Working with Academic Requirements had the highest mean score of 4.24 with a verbal interpretation of always. On the other hand, Developing Metacognitive Awareness had the lowest mean score among the 5 domains with a mean of 4.02 or often. The other three domains of study habits, specifically Preparing for and Taking the Test, Setting Measurable Goals and Developing Metacognitive Awareness, have also gotten a verbal interpretation of often. In totality, all domains of study habits obtained high mean scores, as it is closer to the maximum mean of 5.00.
The abovementioned mean scores and ranking can be attributed to the current policy that is being practiced in all public schools in the Philippines for the academic year 2020–2021. The Basic Education Learning Continuity Plan that DepEd developed provides clear guidance to all public and private schools in addressing basic education challenges linked to the COVID-19 pandemic. This package of educational interventions ensures that the education of every Filipino learner continues through the adjustments made in the K to 12 curriculum. This continuity plan is implemented in the country throughout the period of distance education, and it supports the domain that ranked first in Table 1. As stipulated in DepEd Order 31, which accentuates that teachers should base the grading and evaluation of their distance learning students on meaningful formative and summative assessments, mainly in the forms of quizzes, subject-related output and performance-based tasks, among others (DepEd, 2020b). For this reason, students are expected to engage in academic activities and to exert efforts in submitting written works, as these are the solitary ground for their teachers to evaluate their learning progress.

In the matter of managing time and stressors of the respondents, which ranked second in the results, it is realistic to utter that students have also been placed in difficult circumstances since the pandemic started. This challenge calls for an immediate response to alleviate the academic adversities and afflictions of the students (Yasmin et al., 2020), which is also believed to be targeted through excellent time management skills. According to Nasrullah and Khan (2015), time management can influence the level of stress and coping strategies of students, remarkably when accomplishing school-related activities and when attaining exceptional performance in their academics. This set of research literature substantiated the fact that study habits should be seen in a holistic point of view, comprising the domains of study habits enlisted in Table 1 to guarantee school success and student progress.

**Research Question 2. Do the degrees of study habits of the respondents have significant differences when clustered according to the following demographic information: sex; socioeconomic status; and education level?**

<table>
<thead>
<tr>
<th>Sex</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Male</td>
<td>1,668</td>
<td>4.06</td>
<td>0.50</td>
<td>3160</td>
<td>6.93</td>
<td>2.536E-12</td>
</tr>
<tr>
<td>b. Female</td>
<td>2,388</td>
<td>4.18</td>
<td>0.60</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. \( n = \) Total number of respondents; SD = Standard Deviation; df = degrees of freedom

As shown in Table 2, female secondary students (Mean = 4.18, SD = 0.60) have more laudable study habits during distance learning compared to male (Mean = 4.06, SD = 0.50), and the gap between their mean scores is substantial enough to reject the null hypothesis (\( p \)-value = 2.536E-12 < 0.05). Hence, the degrees of study habits of the respondents are significantly different when contrasted according to their sex.
The result of this study, which signifies evident disparity in the degree of study habits of students depending on their given sex—apparently favoring the female counterpart, gives a positive data outturn knowing the devastating impact of COVID-19 to the education of girls and young women. The United Nations Children's Fund (UNICEF, 2020) acknowledged this claim and stated that the educational situation of young girls is undeniably affected, since many female students are educationally challenged given their restricted access to remote learning amid school closures. The Plan International Philippines (2020) released another full report on the impact of COVID-19 to the education of girls and young women in the country, and it was revealed that the number of hours that female learners are supposed to be spent studying has decreased since the pandemic started. There were even instances when female students have been unable to study during their preferred time because they are tasked with more domestic chores than their male counterparts in the family. Nonetheless, girls and young women who responded to this study continue to withstand the struggling situations they are facing, but this should not mean that these possible barriers to academic success should not be targeted.

Table 3. Study habits of secondary students when clustered according to socio-economic status

<table>
<thead>
<tr>
<th>Socio-economic status</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.   Poor</td>
<td>1,161</td>
<td>4.10</td>
</tr>
<tr>
<td>b.   Low income, but not poor</td>
<td>1,487</td>
<td>4.12</td>
</tr>
<tr>
<td>c.   Low middle income</td>
<td>870</td>
<td>4.17</td>
</tr>
<tr>
<td>d.   Middle middle class</td>
<td>442</td>
<td>4.19</td>
</tr>
<tr>
<td>e.   Upper middle income</td>
<td>51</td>
<td>4.07</td>
</tr>
<tr>
<td>f.   Upper income, but not rich</td>
<td>19</td>
<td>4.16</td>
</tr>
<tr>
<td>g.   Rich</td>
<td>26</td>
<td>4.29</td>
</tr>
<tr>
<td></td>
<td><strong>4,056</strong></td>
<td><strong>4.16</strong></td>
</tr>
</tbody>
</table>

Note. n = Total number of respondents

Table 4. ANOVA statistics of mean scores and socio-economic status

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p-value</th>
<th>F-crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>4.09</td>
<td>6</td>
<td>0.68</td>
<td>2.28</td>
<td>0.03</td>
<td>2.1</td>
</tr>
<tr>
<td>Within groups</td>
<td>1210.54</td>
<td>4049</td>
<td>0.30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. SS = sum of squares; df = degrees of freedom; MS = mean squares; F = F ratio; F-crit = F critical value

The preliminary report of Albert et al. (2020) in connection to income groups and monthly income distribution for Filipino families was used as a basis in clustering the socio-economic status of the respondents. As displayed in Table 3, secondary students who are rich acquired the highest mean with 4.29, followed by those in middle middle class, low
middle income, and upper income, but not rich with mean scores of 4.19, 4.17 and 4.16, respectively. Respondents whose families have low income, but not poor hold the fifth rank with 4.12, those who are considered poor are in the sixth rank with 4.10, while students with upper middle income are in the last rank getting the lowest mean score of 4.07. Henceforth, Table 4 indicates that the computed \( p \)-value of 0.03 is less than the predetermined significance level of 0.05, which means that the null hypothesis is correspondingly rejected. The mean score for the study habits of the respondents with regard to their income group have significant difference.

The data ran through ANOVA divulged that socio-economic status of students is truly a causal factor for the divergence of their study habits. With affluent students gaining higher mean scores for their study habits compared to students from poor and low income, but not poor families, their study routines and practices are expected to be dissimilar. With the pandemic forcing schools to close and leaving students with no choice other than to study at home, the difference in the learning experiences of students from lower-income and higher-income households are possibly heightened (Van Lancker & Parolin, 2020). Seemingly, “family income has significant impacts on children’s educational level, which is assumed to be elevated with the increasing income. A financially well-off family is able to give more, especially educational resources” (Lin & Lv, 2017, p. 53). The fact that study habits do not solely revolve around the time allotted in studying or the routines planned before taking a scheduled examination, the more that families must take heed to the factors affecting the study habits of their children. As reiterated in the five domains that Salva (2020) espoused, study habits involve as well how the academic requirements are submitted and how metacognitive awareness is practiced given all the educational resources of the students. Thus, the more a student is provided with abundant educational resources due to a stable socio-economic status, the more we could anticipate a higher degree of study habits compared to those who are economically challenged.

| Table 5. \( t \)-test for the study habits of secondary students when clustered according to education level |
|---------------------------------------------------------------|-----------|--------|------|---------|---------|
| Education Level                                             | \( n \)  | Mean   | SD   | \( df \) | \( t \)-value | \( p \)-value |
| a. Junior High School                                       | 3,189     | 4.14   | 0.55 | 1374    | 2.10     | 0.02       |
| b. Senior High School                                       | 867       | 4.10   | 0.55 |         |          |            |
|                                                              | 4,056     | 4.12   |      |         |          |            |

Note. \( n \) = Total number of respondents; SD = Standard Deviation; \( df \) = degrees of freedom

The sample size in Table 5 exhibits that there are more junior high school students compared to the number of respondents from the senior high school level. This is accounted to the fact that the City Schools Division of General Trias was only recognised as a separate and new division last 2018. For this reason, there is one senior high school, while there are eight junior high schools. Pertaining to the \( t \)-test statistics, it implies that junior high school students (Mean = 4.14, SD = 0.55) are significantly demonstrating higher degree of study habits.
habits vis-à-vis those students in senior high school level (Mean = 4.10, SD = 0.55). This resulted in the refutation of the null hypothesis (p-value = 0.02 < 0.05), as the difference in the means of two groups also denote a lower chance of random variation.

Education level is an independent variable that may have an indirect influence on the study routines or learning hours of a student. Aside from sex and socio-economic status, the education level is another factor to consider for the distinguishable differences on the study habits of the respondents. Although, this is not a definite case for all. An example is the data set of Vietnamese secondary students from the article of Trung et al. (2020), which divulges a p-value of 0.314 when the grade level of the respondents is correlated with their learning hours and habits during the COVID-19 pandemic. Regardless of grade levels, the abrupt transition from face-to-face classes to distance mode of learning became a challenging move for every student (Magson in Schwartz et al., 2021). No one was excused from experiencing academic or more so emotional difficulties that brought impact to their study habits. The research of Camacho-Zuñiga et al. (2021) seconded the latter difficulties as students from varied education levels expressed disagreeable feelings like boredom, anxiety, and stress towards their current situation. These discomforts can trigger differing unpleasant effects on the performance of students during distance learning. As the study habits of students from junior and senior high school levels demonstrated statistical difference, it could be analysed that every student has still distinctive and varying level of study habits (Ebele & Olofu, 2017; Jafari et al., 2019), and the statistics in Tables 2, 3, 4 and 5 is robust evidence to sustain this proposition.

**Research Question 3. Are the study habits of the respondents significantly different when grouped according to their preferred modality of learning delivery?**

**Table 6. t-test for the study habits of secondary students when grouped according to preferred modality of learning delivery**

<table>
<thead>
<tr>
<th>Modality</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Online Distance Learning</td>
<td>2,472</td>
<td>4.11</td>
<td>0.54</td>
<td>3345</td>
<td>2.17</td>
<td>0.02</td>
</tr>
<tr>
<td>b. Modular Distance Learning</td>
<td>1,584</td>
<td>4.15</td>
<td>0.55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4,056</td>
<td>4.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. n = Total number of respondents; SD = Standard Deviation; df = degrees of freedom*

Considering the data presented above, it could be interpreted that secondary students who enrolled in modular distance learning (Mean = 4.15, SD = 0.55) have superior academic routines or practices when juxtaposed to the study habits of online distance students (Mean = 4.11, SD = 0.54). The mean score of those respondents who are studying through printed modules is significantly different from the mean of those who took their subjects virtually (p-value = 0.02 < 0.05). This finding could be accounted to various factors or reasons that make one modality advantageous compared to the other mode of instruction.
For an instance, Rockinson-Szapkiw et al. (2013) stated that there are students who are actually more invested in using e-textbooks and online learning resources than printed materials. It is due to better grasp of affective concepts, improved psychomotor learning, plus the expense and convenience that the former modality offers than the latter. This, however, may be a cause for the social facet and learning of the students to be disturbed because of their exposure to laptops and computers (Bando et al., 2017). There is even a possibility for students to be introduced to unsolicited content or unwanted graphics that can intensely harm them. Nevertheless, the published work of Pálsdóttir (2019) reiterated that regardless of the pros and cons that modular and online modalities propose, “it is therefore necessary to understand better how they [students] feel that educational material, printed or electronic, supports their learning, and in what areas they think reforms are needed” (Discussion section, para. 1). Though this and the preceding claims from different authors were made pre-pandemic, these can still be used to deduce that the preference of the students unquestionably matters in choosing a particular channel where their lessons will be delivered. With the anticipation that it will improve their academic performance and class standing, education agencies should be disposed to providing options for the modality of learning delivery, especially now that the students across the world are striving to learn in the middle of a global health outbreak.

CONCLUSION

There is a number of scholarly articles related to study habits that have been written and published in the last few years. However, there is a need to look into the significant role of study habits during the pandemic. Further works are needed for the legitimacy of ideas already produced in the past and the continuity of knowledge production, particularly amidst a global health outbreak where academic institutions are left with no choice but to embrace distance education. This is the premise that the researchers of this study upheld to assure its contribution in the chosen area of discourse. The findings that were obtained in this research can be an indispensable instrument to better understand the study habits of Filipino secondary students. With the support of those who voluntarily participated for this quantitative exploration, it was confirmed that sex, socio-economic status, education level, and preferred modality of learning delivery are considered significant determinants for the varying levels of study habits of secondary students. To reiterate, results show that the female respondents have better study habits than the males. In lieu of their socio-economic status, those with rich families have higher level of study habits than those from the other socio-economic brackets. This study was also able to establish the notion that students from junior high school and those who are enrolled in the modular distance learning are demonstrating more remarkable academic practices when compared to those from senior high school and those in the online distance learning modality. In spite of these notable differences, it is indisputable that the students have generally shown an affirmative level of study habits, given its persistent recurrence.
Furthermore, having a deep grasp of the results shared in this research would prove vital implications for policy-makers and curriculum implementers. The current study determined that working on academic requirements topped the other four domains of study habits, which may serve as a success indicator for the division-level educational agency in their pursuit for quality education during this pandemic. Owing to the fact that memorandum orders were precedingly released, which endorsed the need for the submission of outputs and completion of performance tasks, schools will be delighted to know that their students are trying to manifest a good sense of responsibility in working on their requirements. More so, the other four domains were ranked as follows: managing time and school-related stressors, preparing for and taking the test, setting measurable goals, and developing metacognitive awareness.

Like many educational institutions, research such as this can be considered in curriculum planning and implementation. In view of the findings above, while it is true that the respondents have high level of study habits, there appears to be a need for schools to appraise the metacognitive awareness of the students. This key construct can be continuously sustained through focused intervention programs that are embedded in the different learning areas. A list of metacognitive learning strategies could be introduced, such as advance organisers, self-monitoring tools, and meta-attention or metamemory exemplars. Given all these, it is believed that improvement will be attained as per the metacognition of the students, which can lead to better study habits and greater scholastic achievements across all types of learners. As per the time management, students need to be trained to allot time for reading and assessment following the weekly home learning plan used in the basic education level. Proper training should also be done so that the students can reconcile their learning styles and the time given for them to finish their tasks. At the start of the school year, students may also be oriented on the weekly lessons, kinds of assessments, and resources available for them in the new normal of learning. Also, it is of prime importance that students learn to set measurable goals and this can be done by having training or discussions pertaining to developing good study habits. The fact they are expected to work independently in a remote learning setup, empowering the students should be a priority of the school.

Persistently, it is hoped that future studies will be conducted to delve into the correlation of having good study habits and academic performance of the students enrolled in the newly implemented learning modalities, since the pandemic started. The adjustments that the students made to their study habits can be assessed, so it can provide pertinent information to the school for the planning of different capacity-building activities both for teachers and the students. In cognizant of the potential impact of this assessment, it can be an important starting point that will capacitate teachers on how students can be helped in adjusting their study habits given the new situation they are in.
REFERENCES


