



## STUDY HABITS AND STUDENT ONLINE ENGAGEMENT OF BACHELOR PHYSICAL EDUCATION OF THE UNIVERSITY OF MINDANAO, PHILIPPINES

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### Abstract:

The continuity of pre-pandemic student engagement in higher education institutions was put to the test by the new teaching method. This descriptive correlational quantitative research aims to determine the relationship between study habits and online engagement among bachelor of physical education students at the University of Mindanao. The data came from 203 first- through fourth-year university students who participated in stratified online and paper surveys. The statistical techniques used are mean, standard deviation and Pearson's  $r$ . Findings revealed a high level of time management, class attendance and participation, general study and strategy, exam preparation, and note-taking. Also, researchers found a high student level of peer management, instructor and self-directed management and multimodal engagement. Moreover, the study revealed a significant correlation between the two variables. Evidently, study habits turn out to be effective and still be applied in a student online engagement setting.

**Keywords:** study habit, student online engagement, physical education students

### 1. Introduction and Literature Review

Study habits have been altered since the COVID-19 pandemic emerged and have caused consequential concerns and presented difficulties in maintaining student enthusiasm and participation during online teaching and learning, particularly for less advantaged

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students (Habeahan *et al.*, 2022). Studies show that students' engagement in an online learning setting is frequently more difficult than in traditional face-to-face classes; this instant shift caused difficulties for professors as well as students who were underprepared for online learning (Gillett-Swan, 2017; Hew, 2016). When compared to learners who would rather have online classes, those who do not prefer them see a considerable decline in their degree of satisfaction and involvement with the course (Whiting, Ritz, and Hain, 2021; Morris & Clark, 2018), where it has been noted that dropout vulnerability causes lower completion rates (Bernardo, Galve-González, Núñez, & Almeida, 2022; Farrell & Brunton, 2020; Woodley & Simpson, 2014).

In the Philippines, a spontaneous poll found that only 1505 learners (41%) believed they were physically and psychologically capable of participating in online learning given the current circumstances (Baticulon, Sy, Alberto, Baron, Mabulay, Rizada, Tiu, Claron & Reyes, 2021). Student involvement has been the subject of much preceding academic research because of the correlations it has shown across a wide range of learning situations. Thus, academic achievement is thought to be more likely in learners who are more involved (Bond, Buntins, Bedenlier, Zawacki-Ritcher & Kerres, 2020).

The Interest-Driven Creator (IDC) theory demonstrates that students are more engaged in conceptualizing an idea and enhancing their knowledge when they have a greater interest in their study routine (Chen, Chan, Wong, & Looi, 2020). The theory postulates that students can participate in the production of knowledge by developing concepts and objects when they are motivated by an interest (Yu, Mason, Liu, & Kong, 2019). It was shown that good study habits help students achieve better results in class. The results demonstrated that when students have established solid study habits, their engagement and academic performance will elevate (Sherafat, 2016).

Student participation is the central element in learning. This concept is considered to have an impact on academic performance and accomplishment across a variety of educational contexts (Núñez & León, 2019). Engaging learners through interactive educational experiences includes collaborative group projects, student-led presentations and forums, active sharing of resources, course assignments with practical components, and the incorporation of research papers and analyses are all goals of engagement tactics (Martin & Bolliger, 2018). It was demonstrated that despite their preference for in-person instruction, the learners were highly motivated to use remote learning because they understood the significance of finishing their studies (Al-Nofaie, 2020). Student engagement in distance learning increases enjoyment, promotes motivation to learn, reduces feelings of isolation, and improves performance (Martin & Bolliger, 2018). The main indicator of a student's performance in school is said to be their level of involvement (Grocchia, 2018; James, Humez & Philipp, 2020) this affects the class retention and completion rates (Cron, 2020; Athens, 2018; Dolan, Kain, Reilly & Bansal, 2017; Almeda, Zuech, Utz, Higgins, Reynold, Baker, 2018).

The decisions that learners make on what to learn and how to learn during their regular learning processes are referred to as study habits (Xinghua, 2022). Study habits are used as an independent variable in this study and are comprised of five indicators:

time management, class attendance and participation, general study and strategy, exam preparation, and note-taking. First, time management is also described as a type of self-management that places a strong emphasis on knowing what, how, where and when is the right time for that particular activity (Savino, 2016). Second, attendance refers to the regular participation of a learner in educational activities (Gottfried, 2010); student participation is defined as students' actively involved participation in the classroom, their influence on the creation of the program, and their sense of community (Masika & Jones, 2016). Third, study strategies are defined as utilizing one or more senses to comprehend, organize, and remember events and are referred to as changing learners (Ghaedi and Jam, 2014). Then, exam preparation is developed to boost a student's score on a standardized test. Lastly, note-taking is a skill that helps learners retain the important knowledge they have learned and develops their independence (Bahrami and Nosratzadeh, 2017; Saravani, 2019; Umaadevi and Rekha, 2019).

Learners are held more responsible for their study in online learning courses, especially those that are totally asynchronous, which can be difficult for those who have trouble setting their own pace for study (Gillett-Swan, 2017). Engaged learners are more likely to perform well in core lessons and require fewer academic interventions (Vegas & Winthrop, 2020). A conceptual perspective for online learning engagement presented by Bond and Bedenlier (2019) integrates the three aspects of engagement, interactions that can affect the engagement dimensions and potential short- and long-term results.

In this research, student online engagement serves as the dependent variable, which includes four indicators: peer engagement, multi-modal engagement, instructor engagement, and self-directed engagement. Peer engagement in online courses describes how involved learners are with their classmates (Prior, 2016). He argued that peer participation helps students learn course material, gain confidence, and establish connections with their colleagues. Second, multi-modal engagement is communicated by lecturers in all courses in varying degrees of multimodal and participatory discourse, and it has been asserted that understanding the many ways in which semiotic resources are used (Kress, 2010; Norte, 2016, 2018; Ruiz-Madrid & Fortanet-Gómez, 2019). Third refers to the teacher's participation in the online course. Lastly, the term "*self-directed engagement*" alludes to a student's active participation in a variety of resources, opportunities, and tasks during an online course in order to design memorable learning experiences (Rashid and Ashgar, 2016).

The recent switch from traditional to blended learning methods for delivering instruction has transformed and challenged how students study and engage in learning. Since physical education students learn best through kinesthetic-based procedures or demonstrations, there is a need to understand their study habits in an online setting in order to have an efficient and successful performance task. As a result, the learning process is isolated because of the distance between students and teachers (Gillett-Swan, 2017). Student online engagement appears to be a barrier to efficient learning and has an impact on study habits. The vast majority of learners said they had trouble engaging with their classmates and teachers as well as controlling the pace of their coursework

(Hollister, 2022). The inclusion of study habits, however, is lacking. According to what is generally known about these constructs, fewer studies have been done on physical education, and more have been done in other fields (Jenong & So, 2020). Finally, this study can serve as a starting point for future research that may potentially result in the development of a deep comprehension of the data collected, particularly a quantitative one.

The study has implications for society, educational institutions, curriculum developers, and physical education students because study habits have altered as a result of the shift to online learning, which is a trending delivery method for instruction. On a worldwide scale, this recent study shows that knowledge acquisition through effective study habits will increase online engagement. Additionally, this is crucial for institutions of higher learning, particularly the University of Mindanao, as they have a propensity to recognize the value of improving the learning environment. Additionally, it encourages an understanding of how knowledge is acquired and how perceptual ability develops in people. The study's conclusions will serve as a foundation for subsequent research on the possible influence of study habits on online involvement.

A series of research questions that aim to understand students' online engagement and study habits serve as a guide for researchers. Additionally, these questions addressed the varying study habits that affect the level of students' online engagement. The research primarily investigates the study habits of students, describes the level of student online engagement and determines the significant relationship between study habits and student online engagement among the respondents. Furthermore, the study tests the null hypothesis that there is no significant relationship between study habits and student online engagement. The hypothesis will be tested at a significance level of .05, which tends to measure and conclude if there is a significant relationship between the two variables.

## **2. Material and Methods**

### **2.1 Research Respondents**

The respondents of the study are students majoring in Physical Education at the Teacher Education Institution at the University of Mindanao (Main Campus), Davao City, Philippines. Respondents who took part in the study are enrolled students under the Bachelor of Physical Education school year 2022-2023, consisting of 155 1st-year students, 84 2nd-year students, 78 3rd-year students, and 103 4th-year students. A total population of 420 respondents were identified, and using Rao soft with a 5% margin error, the computed sample size is 201. Since this program mainly focuses on physical activity, it is totally different from general knowledge subjects (Jeong & So, 2020). Therefore, students like to analyze information using their own experiences and actions in order for self-development and improvement. Thus, it affects the online engagement and study strategies of PE students considering the fact that Physical Education is effective when taught in a face-to-face environment. The researchers use stratified random sampling as

a sampling technique by dividing the population into their common interests and characteristics.

## 2.2 Materials and Instruments

The study used a survey questionnaire as an instrument and materials for gathering data. Researchers used a social media platform, which is messenger to gather data. The study habits questionnaire is adapted from Bajwe, *et al.*, (2011) research and Online Engagement Strategies Questionnaire (OESQ) Martin and Bolliger (2018). Researchers divided the questionnaire into two parts. The Study Habits questionnaire covered five indicators, i.e. Time Management, Class Attendance % Participation, General Study Strategies, Exam Preparation and Note Taking which is intended to investigate students' study habits. Furthermore, the survey questionnaire also provides demographic data on the respondents and is designed on a Likert-5 scale with different responses ranging from Always to Never.

| Range of Means | Descriptive Equivalent | Interpretation                                       |
|----------------|------------------------|--|
| 4.20 – 5.00    | Always                 | This means study habits are always observed          |
| 3.39 - 4.19    | Often                  | This means that study habits are oftentimes observed |
| 2.58 – 3.38    | Sometimes              | This means that study habits are sometimes observed  |
| 1.77 – 2.57    | Rarely                 | This means that study habits are rarely observed.    |
| 1.00 – 1.76    | Never                  | This means that study habits is never observed       |

The Online Engagement Strategies Questionnaire covered four indicators, i.e. Peer Management, Multimodal Engagement, Instructor Engagement and Self-Directed Engagement, which tends to measure the importance of the three types of interaction framework: student-student interaction, instructor-to-student interaction and student-content interaction (Moore's, 1993b). Responses were interpreted based on the data below.

| Range of Means | Descriptive Equivalent | Interpretation                                     |
|----------------|------------------------|--|
| 4.20 – 5.00    | Always                 | This means that the students are always engaged    |
| 3.39 - 4.19    | Often                  | This means that the students are engaged often     |
| 2.58 – 3.38    | Sometimes              | This means that the students are engaged sometimes |
| 1.77 – 2.57    | Rarely                 | This means that the students rarely engage         |
| 1.00 – 1.76    | Never                  | This means that the students are never engaged     |

## 2.3 Design and Procedure

The researchers used a descriptive, correlational design as the study entailed a relationship between study habits and student online engagement of Bachelor of Physical Education students of the University of Mindanao. Furthermore, descriptive research is to describe a population, circumstance, or phenomenon precisely and methodically. It can respond to inquiries about what, where, when, and how (McCombes, 2022).

Correlation to determine the strengths and direction of two research variables (Strangor & Walinga, 2014).

Additionally, a descriptive component was employed to conclude the variables' relationships (Piotrowski, 2017). After receiving permission to conduct the study, the researchers utilized Google Forms to design an online version of the questionnaire and a printed questionnaire. The researchers decided to poll first- through third-year students face-to-face and fourth-year students online. The questionnaire was distributed to the respondents by the researchers using the platform messenger. Following that, the desired number of responses was gathered and tabulated with the help of a statistician. By managing access and storing the documents, researchers safeguarded the confidentiality of respondents' data during the whole study. The researchers then examined the information to draw conclusions and recommendations.

The data collection exercise was completed within one and a half months. The outcome underwent statistical tabulation, assessment, and analysis. The levels of indicators for the two variables, studying habits and student online engagement, were determined by mean and standard deviation. The null hypothesis' acceptance or rejection was decided using the P-value. To determine the strength and direction of the association, statisticians used Pearson's r.

### 3. Result and Discussion

This section of the study introduced and discussed the results, containing the study habits, student online engagement, and the correlation of two variables.

#### 3.1 Level of Utilization of Study Habit

Table 1 presents the mean of each indicator and the overall mean that determines the utilization of study habits. As shown in the data, the overall mean is 3.86 (S.D. = .49), which means that students' time management, class attendance and participation, general study and strategy, exam preparation and note taking is high. Thus, the students have perceived that study habits are often observed.

**Table 1:** Level of Utilization of Study Habits

| Indicators                         | Mean        | SD          |
|------------------------------------|-------------|-------------|
| Time Management                    | 3.65        | 0.65        |
| Class Attendance and Participation | 4.15        | 0.59        |
| General Study and Strategy         | 3.96        | 0.56        |
| Exam Preparation                   | 3.73        | 0.67        |
| Note Taking                        | 3.88        | 0.85        |
| <b>Overall</b>                     | <b>3.86</b> | <b>0.49</b> |

From the table shown, it can be deduced that class attendance and participation had a mean score of 4.15 (S.D. = .59), which fell under the high level. The data indicated that utilizing study habits is significantly impactful to students' learning processes. Study

habits have been found to have a positive impact on students' performance and management. It can aid students in getting the most out of their time, absorbing information more efficiently, and keeping what they have learned in mind longer. Yet, depending on the type of class—traditional, online, or blended—study habits can be modified.

Based on the data gathered by the researchers, all indicators fall under the category of being often observed based on the mean value shown. Using the mean value as a basis, ranking from highest to lowest, General Study and Strategy ranked first, with a mean value of 3.9 (S.D. = .56), followed by Note Taking which garnered a mean value of 3.88 (S.D. = .85), Exam Preparation with 3.73 (S.D. = .67), and lastly, the indicator that got the lowest mean value, which is Time Management with 3.65 (S.D. = .65). Although class attendance and participation had a higher mean value compared to others, all indicators still received a reasonable value under the same category. Simply put, it means that the execution of good study habits is contingent upon how well the class is done.

The findings of this study indicate that learners are quite interested in their online classes. This is in line with the measurement of online students' engagement (Jasper, 2021), which included the measurement of interest level towards the course, effort, and routine for class work, and whose findings statistically returned a reasonable mean score. Also, this concurs with Mihai, Albert, Mihai, and Dumitras (2020), which indicated that highly engaged students exhibit active behavior, involvement, participation, and confidence to take part in and complete class assignments. Additionally, the previous research (Baloran, *et al.*, 2020; Dixson, 2015; Heflin & Macaluso, 2021) stressed that students allocate time and effort to online learning through manifesting a positive attitude, interaction with course materials, and participation in both synchronous and asynchronous classes. Simply put, students' study habits were affected in a variety of ways by blended learning.

### 3.2 Level of Student Online Engagement

Table 2 shows the level of student online engagement based on the description of respondents' responses to each indicator. For the overall mean of student online engagement, the table displays 3.95 (S.D. = .48), which falls on a high level.

**Table 2:** Level of Online Engagement

| Indicators                              | Mean        | SD          |
|---|-------------|-------------|
| Peer Management                         | 3.81        | 0.56        |
| Instructor and Self-directed Engagement | 4.07        | 0.57        |
| Multimodal Engagement                   | 3.98        | 0.59        |
| <b>Overall</b>                          | <b>3.95</b> | <b>0.48</b> |

In the presented data, Instructor Engagement and Self-Directed Engagement obtained the highest mean score of 4.07 (S.D. = .57), which means they are oftentimes engaged. This includes the method in which students think in between classes, how they try to make the class virtually engaging, how motivated they are to study, and how relevant and

applicable the material is to real-world situations and interpersonal interactions. Multimodal Engagement obtained a mean value of 3.98 (S.D. = .59), which means it is often engaged the same as the highest value. It implies that since online classrooms focus more on active participation through speaking and oral recitation, students are frequently engaged throughout class. Multimodal learning is quite popular in traditional settings since it often involves hard copies, such as picture books, but it is also present in online learning classes because students can use social media, post-digital presentation slides, read e-books, and view digital advertisements.

However, peer management obtained the lowest mean value of 3.81 (S.D. =.56), which signifies that it is still oftentimes manifested along with the other two indicators. This number is not surprising given that in an online classroom, where students are not physically present, participation is considered different. Since peer management entails a linear relationship, online class respondents found it challenging to communicate with one another. Students are thus unable to join forum conversations right away, directly assist other students, or establish friendships.

The results of previous studies, which documented high levels of engagement (Baloran, Hernan, & Taoy, 2021; Handelsman, Briggs, Sullivan, & Towler, 2005), are similar to the findings of the current study. Also, it was discovered that students who are satisfied with their online education are more likely to be involved in terms of their knowledge, feelings, engagement, and performance. Furthermore, earlier studies (Baloran, 2020; Dixson, 2015; Heflin & Macaluso, 2021) emphasized the importance of students devoting time and effort to online learning by displaying an optimistic response, interacting with the course materials and taking part in both synchronous and asynchronous classes. According to Inder's (2021) analysis, the current study exhibits a high degree of emotional engagement. However, as the aforementioned author noted, participation and involvement are challenging, as the results of this study further demonstrate.

This study's findings indicate that online students are very engaged in their coursework. This is congruent with the evaluation of online students' engagement (Jasper, 2021), the findings of which numerically produced a higher mean score, consisting of the evaluation of the student's level of interest in the course, their effort, and their regularity in completing class assignments. Also, this is consistent with the findings of Mihai, Albert, Mihai, and Dumitras (2022), who highlighted that highly engaged students exhibit active behavior, engagement, collaboration, and a willingness to take part in and complete class activities.

### **3.3 Relationship of Study Habits and Student Online Engagement**

Presented in Table 3 is the relationship between the study habits and online engagement. The overall r-value is .585, which indicates that the relationship between the two variables is moderately positive. This implies that the analysis revealed a direct relationship between the study's two variables. Therefore, the result leads to rejecting the



null hypothesis, concluding that there is a significant relationship between study habits and student online engagement.

**Table 3:** Relationship of Study Habits and Online Engagement

| Online Engagement                       | Study Habits    |                                  |                            |                  |             |         |
|---|-----------------|----------------------------------|----------------------------|------------------|-------------|---------|
|   | Time Management | Class Attendance & Participation | General Study and Strategy | Exam Preparation | Note Taking | Overall |
| Peer Management                         | .507*           | .277*                            | .538*                      | .442*            | .400*       | .593*   |
| Instructor and Self-Directed Management | .302*           | .218*                            | .425*                      | .419*            | .180*       | .447*   |
| Multimodal Engagement                   | .354*           | .242*                            | .432*                      | .351*            | .309*       | .451*   |
| <b>Overall</b>                          | .462*           | .288*                            | .547*                      | .476*            | .347*       | .585*   |

\*p<0.05

The presented results in this study posit a moderately positive correlation between study habits and student online engagement among bachelor of physical education students at the University of Mindanao. In accordance with it, the relationship between the two variables, including all indicators, resulted in a flat positive correlation. Therefore, the results clearly provide information that when study habits are high, student online engagement is also high.

Furthermore, the findings of several studies, including those by Almoslamani (2018), Bergdahl, Jalal, & Uno (2020), Edwards (2017), and Tetzlaff (2017) support the results of the present research, which found that knowing and applying good study habits increases student satisfaction and boosts engagement in both online and blended learning.

#### 4. Conclusion and Recommendations

The concept of study habits has been integrated into student online engagement, which plays an integral role in the learning process's success. The habit of studying significantly influences students' future success as well as their academic accomplishments (Chen *et al.*, 2018; Ebele and Olofu, 2017). Researchers found enough evidence to conclude that there is a moderately positive correlation between the use of study habits and student online engagement. Therefore, the results are consistent with the empirical studies of student engagement and study habits over the past years (Bond *et al.*, 2020). An important factor in the growth of knowledge and cognitive abilities is study habits. A person's study habits reveal how much they will understand, how far they want to go, and how much money they want to make (Rabia, M. Mubarak, N. H. Tallat, and W. Nasir, 2017). All of these could be determined during the course of a person's life with the aid of their study

habits. It follows that study habits are thought to be related to academic performance and student engagement.

Furthermore, experts advise faculty and teachers to implement a distinctive and interesting teaching strategy in order to sustain a meaningful teaching and learning process as blended and hybrid learning modes are adopted in higher education. For future researchers interested in researching study habits and student online participation, there are several recommendations based on the study's findings and conclusion. One suggestion for future research is to take an approach to further analyze students' experiences and find out how study habits affect students' engagement in online platforms or blended learning modes. Students can create knowledge - which is composed of concepts and artifacts - if they are motivated by an interest in doing so (Chen *et. al.*, 2018).

### **Conflict of Interest Statement**

The authors declare no conflicts of interest.

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