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Study Behaviour of Smartphone users and non Smartphone users of the Senior High School Students

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ABSTRACT

The research is all about finding the study behaviour between smartphone users and non-smarphone users among the selected senior high school Grade 12 students in Southwestern University PHINMA located at Sambag I, Cebu city Philippines. There are 40 respondents of the study. The researchers were using the quantitative casual comprehensive to have in depth discussion and to fully understanding of the study. The information was gathered through giving a standard survey questionnaire to the respondents. Weighted mean and t-test was used as statistical treatment. The summary of data shows that the study behaviour of the students both smartphone users and non-smartphone users were almost the same. The $t > -2.06$, therefore, there is no significant difference between the student with smartphone and the student without smartphone and the hypotheses is accepted.

Students used their smartphones for entertainment, social media and not much for educational purposes. It was noticeable in this study that the students didn't get help from their teachers in organizing or completing their homework. the researchers recommended that the students should consider smartphone not only for entertainment and social media but also for academic purposes. Smartphones would also be an essential tool for the students because of its applications that they don't need to bring computer in finding new information. It is also recommended for further research on the effect of the use of smartphone in the academic performance of students.

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CHAPTER I

THE PROBLEM

Background Information of the Study

Users do not realize the benefits of cellphone for education, nor even for the communication functions for which it was originally designed. Educators still see the computer and the cell phone as unrelated devices, and the tiny cell phone more as a personal accessory, especially for young people. With falling prices and increasing functionality, however, it is virtually certain that not too far in the future all of the world's students will have a cell phone. This is sufficient reason and motivation for educators to explore the possibility of making the cell phone an important tool in the educational systems of developed and developing countries. Smartphones enables the educators and students to talk with one another anytime and anywhere. This will contribute students because they will have any kind of access for information, and they could have their research at any point. But smartphones will also cause distraction to their learning environment because it has a potential to become an entertainment¹.

Students who were not using their mobile phones wrote down 62% more information in their notes, took more detailed notes, were able to recall more detailed information from the lecture, and scored a full letter grade and a half higher on a multiple choice test than those students who were actively using their mobile phone².

One article showed some startling statistics about the use of smartphones for cheating in the classroom. This could be through the use of text exchanges with other students, using the Internet to find answers, using advanced calculators and phone applications, taking snapshots of an exam, or reading notes that are saved on the phone to help on the test³.

Students who regularly use their mobile devices or smartphones tend to jot down less information, Remember less information, and perform worst specially in multiple choice type of tests than students who abstain from using their mobile phones during discussions and class hours. So it is very clear that students who regularly use their smartphones during class hours were distracted and can't focus on listening to their teachers. Mobile phones have lots of benefits because of its potential to give you information and also it could give pleasure to users that most of the users overused it and they tend to be dependent on smartphones or in other words users were being addicted⁴.

In the study titled "Social Network: Academic and Social Impact on College Students", found that there is a correlation between the students GPAs and their usage of social networks. An interesting finding was that many of our respondents do not use social sites to look for college-related information;

however, many of them encourage the idea of having online study groups. Another finding showed that the students tend to use social networks for social purposes more than the academic ones⁵.

Smartphone is a gadget inevitable to the senior high school students of Southwestern University PHINMA. Hence, the researchers were interested to find out the study behaviour of students that are smartphone users and non-smartphone users.

Statement of the Problem

The study will determine the study behaviour of smartphone and non-smartphone users of the selected Senior High School STEM B students of Southwestern University PHINMA.

Specifically, this answers the following questions:

- 1.) What is the profile of the respondents in terms of:
 - 1.1 Age;
 - 1.2 Sex?
- 2.) What is the study behaviour of the selected Senior High School STEM B students of Southwestern University PHINMA if:
 - 2.1 Smartphone Users;
 - 2.2 Non Smartphone Users?

Null Hypothesis:

HO1: There is no significant difference of the study behaviour between smartphone users and non-smartphone users among the selected SHS Grade 12 STEM B students

- 3.) Is there a significant difference between the study behavior of smartphone users and non-smartphone users?

Scope and Delimitation of the Study

The study was conducted by the researchers among the selected of Senior High School Grade 12 STEM B students in Southwestern University PHINMA. This provides information about students that are smartphone user and non-user in terms of their study behaviour. The study is limited only to 40 Senior High School Grade 12 STEM-B students of Southwestern University PHINMA for A.Y. 2017-2018. The study will not tackle any concepts beyond the above mentioned.

Significance of the Study

This study evaluates about the study behaviour of smartphone and non-smartphone user students and was hopefully projected to benefit the following:

School Administration. To be able to shape the current educational routine among students and also to be able to use advantages and disadvantages of smartphones in helping their students on their academic endeavours like spreading information and easy access to educational tools.

Parents. To be aware about their children's approach towards smartphone and its contribution to their study habits.

Teachers. They will be able to improve and adjust their teaching strategies to the learners or students.

Students. To be aware on how smartphone affects and contribute to their study behaviour.

Researchers. To be able to determine the study behaviour of smartphone user and non-smartphone user students.

Future Researchers. This will be used as future reference to a parallel study. The research will provide a significant contribution to existing knowledge in this area.

Definition of terms

These are some of the terms that we give meaning that is suitable to our study and help to understand furthermore of the different words that is being used in our study.

Students (STEM B) – Respondents of the study. Is the academic disciplines of Science, Technology, Engineering, Mathematics.

DLP – Development Learning Program.

Smartphone – A mobile device that has a camera and can download applications of the students.

Study behaviour – Refers to the ways of studying on a particular subject.

CHAPTER II

REVIEW OF RELATED LITERATURE AND STUDIES

The term study behaviour can be as the student's way of study whether systematic, efficient or inefficient⁶. Study habits keep the learner perfect in getting knowledge and developing attitude towards things necessary for achievement in different field of human endeavour. Students who develop good study habits at school increase the potential to complete their assignments successfully and to learn the material they are studying. Study habits can be good ones, or bad ones. Good study habits include being

organized, keeping good notes, reading your textbooks, listening in class, and working every day. Bad study habits include skipping class, not doing your works and etc⁶.

Study habits is a techniques, a student employs to go about his or her studies which are consistent and have become stereotypes as a result of long application or practice⁷. Study habits can be a big factor for the children in order to improve their knowledge in school. Study habits may help everyone whether systematic, efficient or inefficient. It considered as strategies to improve their reading ability and have some more knowledge in academics. It is an individual's ability, or learning activities. It is defined as "strategies of work" which have some common denomination activities as taking notes, using the library, improving reading ability, building vocabulary, writing term paper and taking examinations. There are many children who have different study habits that were very important to them⁷.

Nowadays, most of all the people own a mobile phone, specifically smartphones, among teenagers but these mobile phones are only used for communication and entertainment purposes. There is no a mobile learning application developed to address the problem in lack of application for mobile phone based on learning and the distant learning. Mobile learning as the acquisition of any knowledge and skill by using mobile technology anywhere, anytime that results in an alteration behaviour⁸. Mobile learning is also refer as a facility that supplies a learner with general electronic information and educational content that aids acquisition of knowledge regardless of location and time⁹ Mobile users demand more choices more opportunities to customize their phones and more functionally. It is a sort of learning that happens when the learner is not at fixed, Predetermine location or learning opportunities offered by mobile technologies¹⁰. Mobile learning as being concerned with learning mobility in the sense that learners be able to engage in educational activities without being tied to a tightly – delimited physical location¹¹. Aside from the rated increase of the usage of mobile devices, difference studies has discovered the usefulness of mobile devices. Mobile learning and integration of advance technologies in education¹².

Allow learners to distribute, collect, and share information with easiness, resulting more successful collaboration and can be applied as academic support for learners. The portability of devices coupled with wireless connectivity is bringing significant benefits to learners in terms of flexibility of access to learning materials¹¹.

A study claimed that mobile devices are good tools engage non-traditional learners they remove formality, which is considered among the most frightening aspect for those who have not engaged with learning; and that the use of mobile devices improved retention of learners¹¹.

Study habit or study behaviour as study pattern, including but not limited to frequency of studying sessions, review of material, self-testing, review of material, practice of learned material and studying in conducive surrounding. Class activities, assignments, and examinations and anticipated to enhance the students habits in studying which will affect the amount of knowledge students can gain to their memory¹³. The understanding of one of the basic inputs in the education process that the students study schedules and its relationship to academic performance is at present limited at best¹⁴. The thought of the study habit broad, as it combines nearly all other sub-concepts such as study attitude, study methods and study skills, (Hussain, 2000). There is a common expression towards studying in a comment such as “I study but cannot remember what I study” or “the lessons are too long “.Study attitude refers to predispositions which students have unfold towards private reading. Study method is the application and knowledge of potent study skills or methods by the students¹⁵.

A good study habits through planning helps the students to be ready for what is ahead, and finish their academic goals. Thus, lack of study habits basically puts the students at disadvantage, and this is the main reason why students need remedial classes. Improving good study habits extremely lowers student’s academic problems and failure to finish college degree¹⁶.

Proper study habits and skills entail to proficiency as well as a high quality of learning. Productive study requires conceptualization and intention. It could be include some different kinds of skills such as note-taking, observation, asking questions, listening, thinking, and presented idea regarding discovering new information. Thus, the learners should be interested in learning and must be able to apply needed skills and they should commit their selves into learning in order to acquire productive study because study requires interest and intention and when the learners is passionate to his/her study then it is possible for them to obtain new information and knowledge¹⁷. On the other hand, inefficient study leads to waste of time and learner’s energy. Study habits and skills like other skills can be taught and learnt. Accordingly, educational researches intend to find out effective ways to improve student’s study habits, and the most suitable age of learners where they can learn those skills¹⁸.

Therefore a child that form effective study habit is more likely to budget his time and learn easily, while a student that form bad study habit will not only allot his time wrongly, he will also procrastinate, create study problem and he may have difficulty adjusting in school Hays, (2002).

Theoretical Framework

This research is founded by the Gestalt (field) Theory. It was formulated by Wertheimer, Koffka and Kohler in 1912. Gestalt means pattern. The theory states that the whole of anything is greater than its parts. The student associate its action and behavior into its environment. The learner should be encourage to set their own goals for learning. Learning will be more meaningful if children can establish a relationship among different aspects of knowledge. Children should be encouraged in order to facilitate their interaction with the environment. A good study pattern or behavior can lead to a better academic performance.

CHAPTER III

METHODOLOGY

Research Design

The researchers used the quantitative and qualitative research approach to determine the study habits of smartphone and non-smartphone users of STEM B students of Southwestern University PHINMA, Cebu City. Descriptive method will be used to describe the characteristics of a phenomenon being studied, and was also the fact finding study with an adequate and accurate interpretation of the findings. It also gives emphasis of what actually existed such as current situation, practices or any current phenomena.

Research Environment

The researchers conducted their study at Pharmacy building, Southwestern University PHINMA, Villa Aznar, Urgello Street, Sambag I., Cebu City, Philippines.

Research Respondents

The respondents are the students of Southwestern University PHINMA of Senior High School STEM B students. They have contributed to the information of the research especially on the determining the study habits of the smartphone and non-smartphone users of Southwestern University PHINMA. There were forty (40) respondents out of one hundred sixty one (161) total population of STEM B students.

Research Instruments

The researchers used the standardized survey questionnaire (quia.com) as a primary tool in gathering the data. It is composed of the profile of the respondents and the proper questions regarding

the study habits of smartphone and non-smartphone users among forty (40) Science, Technology, Engineering, Mathematics (STEM) B Students of Southwestern University PHINMA. The question given to the respondents were used in determining the study habits of the respondents. The data gathered were collected tabulated, presented and interpreted to come up with a conclusion of the study.

Data Gathering Procedure

Data gathering began by seeking approval from the research instructor about the topic of the research study. After the approval, the survey questionnaire were distributed during vacant time of the predetermined numbers of respondents of STEM B. The researchers gave them enough time to answer and at the same time they were allowed to ask questions to clarify items in the survey questionnaire. Accomplished questionnaires were then gathered and the responses were tallied, statistically analyzed and interpreted.

Statistical Analysis

These are the tools being used to interpret the data:

Simple Percentage for frequency –is used to identify the demographic information of the respondents, such as the age and gender.

Weighted average –it is used to evaluate the study habits of smartphone and non-smartphone users the 40 selected STEM B students.

T-test –A statistical test involving confidence limits for the random variable t of a t-distribution and used especially in testing hypotheses about means of normal distributions when the standard deviations are unknown.

CHAPTER IV: PRESENTATION, ANALYSIS & INTERPRETRATION OF DATA

This chapter shows the data which were gathered through the use of standard survey questionnaire regarding the study behaviour of smartphone users and non-smartphone users among the selected Grade 12 STEM B students of Southwestern University PHINMA, Cebu City. This data were tallied and tabulated after which these were presented, analyzed, and interpreted in table forms.

Majority of the respondents that are smartphone users were female with 14 or 70% of the respondents. There were only 6 or 30% of the respondents were male. Most of them were 18-19 years old. There were also 13 or 65% female and only 7 or 35% male non-smartphone respondents. On the other hand there were more respondents aging 16-17.

Table 1-Profile of the respondents Smartphone and Non-smartphone Users N=40

	Smartphone Users		Non-smartphone Users	
	Frequency	Percentage	Frequency	Percentage
Sex				
Male	6	30	7	35
Female	14	70	13	65
Total	20	100	20	100
Age				
16-17	8	40	11	55
18-19	12	60	9	45
Total	20	100	20	100

Table 2 revealed the study behaviour of the non-smartphone users of Senior High School Grade 12 STEM B students. Items 1, 2, 3, 5, 6, 7, 8, 9, 12, 13 and 15 got a weighted mean with an interpretation of usually. Items 4, 10, 11, and 13 got a weighted mean with an interpretation of sometimes which means that the respondents sometimes practice this study habits.

Table 2-Comparison of Study behaviour of Smartphone Users and Non Smartphone Users

Questions	Smartphone Users		Non Smartphone Users	
	Weighted mean	Interpretation	Weighted Mean	Interpretation
1. I have a place to study that is free from distractions and comfortable.	4.0	Usually	4.0	Usually
2. I know what sound environment works best for me to study.	3.5	Usually	3.9	Usually
3. I complete my assignments on time.	3.45	Usually	3.65	Usually
4. I turned down the chances for social activities or reschedule them if I know I have homework to do or a test to study.	3.60	Usually	3.40	Sometimes
5. I have a certain time of day that I usually do my homework.	3.75	Usually	3.65	Usually
6. I begin a long term assignment shortly after it is given to me instead of waiting until the night before.	3.40	Sometimes	3.70	Usually
7. I am organized when it comes to books, notebooks, and school supplies.	3.85	Usually	3.90	Usually
8. I get help at home staying organized or completing home work.	3.45	Usually	3.75	Usually
9. I am comfortable asking for a help when I don't understand something.	3.8	Usually	3.45	Usually
10. I get help from teachers staying organized or completing homework.	2.38	Almost never	3.15	Sometimes
11. I stay after school for help from teachers.	2.40	Almost never	2.85	Sometimes
12. I know what my homework is.	3.70	Usually	3.85	Usually
13. I spend more than two hours each night on homework.	3.05	Sometimes	3.55	Usually
14. I ask my friends to study or do homework with me	3.15	Sometimes	3.30	Sometimes
15. I would like to work on getting better at doing homework.	3.75	Usually	3.85	Usually
GRAND MEAN	3.41	Usually	3.60	Usually

Legend:

4.21 – 5.00 *Almost always* 1.81 – 2.60 *Almost Never*
 3.41 – 4.20 *Usually* 1.00 – 1.80 *Never*
 2.61 – 3.40 *Sometimes*

Table 2 revealed the study behaviour of the smartphone users of Senior High School Grade 12 STEM B students. Items 1, 2, 3, 4, 5,7,8,9, 12 and 15 got a weighted mean that has an interpretation of usually. It would tell a study habits that was usually practice by the students. Items 13 and 14 got a weighted mean of 3.05 and 3.15, it appeared that the respondents sometimes did these study behaviour. Items 10 and 11 got a weighted mean of 2.38 and 2.4, and it appeared that the respondents almost never did these study habits. In the grand mean it was found out that the smartphone users usually practice those study habits.

It also revealed the study behaviour of the non-smartphone users of Senior High School Grade 12 STEM B students. Items 1, 2, 3, 5, 6, 7, 8, 9, 12, 13 and 15 got a weighted mean with an interpretation of usually. Items 4, 10, 11, and 13 got a weighted mean with an interpretation of sometimes which means that the respondents sometimes practice this study habits.

Table 3- Significant difference Between to Study Behaviour

Respondents (students)	Mean	Level of significance	Standard Deviation	t-test	Interpretation
With smartphone	10.6	0.05	3.74	-0.77	Accept Ho
Without smartphone	11.5	0.05	2.80	-0.77	Accept Ho

INTERPRETATION:

- Level of significance = 0.05
- If $t_c < -2.06$ and $t_c > 2.06$, therefore reject Ho.

The table 3 shows the comparison of the results of the study behaviour between smartphone and non-smartphone users. It shows that the $t_c > -2.06$, therefore there is no significant difference between the student with smartphone and the student without smartphone and the hypotheses is accepted. It revealed that there is no significant difference as to the study habits between the smartphone and non-smartphone users.

CHAPTER V

SUMMARY, RECOMMENDATION AND CONCLUSION

Summary of Findings

The research is all about determining the study behaviour between smartphone users and non-smartphone users among the selected students of Senior High School Grade 12 STEM B students. The researchers were using the quantitative casual comprehensive to have in depth discussion and to fully understanding of the study. The information was gathered through giving a standard survey questionnaire to the respondents. The researchers had disseminated the questionnaires to the respondents who were the Senior High School Grade 12 STEM B students. They have given enough time to answer it. The research questionnaires were a big help to our study to develop and aid to the problem.

Majority of the respondents were female. Younger respondents aging 16-17 were non-smartphone users while the older respondents aging 18-19 were smartphone users.

Moreover, the summary of the tabulated data was clearly stated: Table 2.1 revealed a grand mean of 3.42 which means that the smartphone users usually practice those study behaviour. Table 2.2 revealed in the grand mean of 3.60 which means that the non-smartphone users usually practice those study habits.

The table 3 shows the result of the responses of the randomly selected SHS STEM B students out of the survey. The variable X is the stem-B students with smartphone while the variable Y is the STEM-B students without smartphone.

The table 3 shows that the $t_{c} > -2.06$, therefore there is no significant difference between the student with smartphone and the student without smartphone and the hypotheses is accepted.

CONCLUSION

The researchers concluded that the smartphone users usually practice the study behaviour except for some items which the respondents answered almost never on the following items:

I get help from teachers staying organized or completing homework.

I stay after school for help from teachers.

The non-smartphone users also usually practice the study behaviour except also for some specific items that they answered sometimes. It was also concluded that there is no significant difference between the student with smartphone and the student without smartphone and the hypotheses is accepted. Smartphone maybe used for entertainment, social media and not for educational purposes. The

respondents (students) of this study is under the Dynamic Learning Program (DLP) wherein the contact hours of the teacher and students is limited only to twenty (20) minutes for discussions per meeting and so it is understood that the respondents (students) just depend on themselves and not to the teachers.

RECOMMENDATION

Based on the conclusion, the researchers recommended that the students should consider smartphone not only for entertainment and social media but also for academic purposes. Smartphones would also be an essential tool for the students because of its applications that they don't need to bring computer in finding new information. It is also recommended for further research on the effect of the use of smartphone and in the academic performance of students and the teaching performance of the teachers.

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