

**THE RELATIONSHIP BETWEEN SMARTPHONE USE AND ACADEMIC
PERFORMANCE OF GRADE 12 HUMSS FAITH IN FRANCISCO
RAMOS NATIONAL HIGH SCHOOL**

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**RESEARCH PAPER SUBMITTED TO THE FACULTY OF THE DEPARTMENT OF
EDUCATION, FRANCISCO RAMOS NATIONAL HIGH SCHOOL,
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
OF THE SUBJECT**

INQUIRIES, INVESTIGATION, AND IMMERSION

MAY 13, 2024

In partial fulfillment of the requirements in Inquiries, Investigations, and Immersions this research paper entitled "THE RELATIONSHIP BETWEEN SMARTPHONE USE AND ACADEMIC PERFORMANS OF GRADE 12 HUMSS FAITH IN FRANCISCO RAMOS NATIONAL HIGH SCHOOL.", prepared and submitted by Rina Ambalate, Irene Am-is, and Maria Guia Tenerife are hereby recommended for Oral Examination.


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31's Teacher

In partial fulfillment of the requirements in Inquiries, Investigations, and Immersions, and on the recommendation of the Oral Examination Panelists, this research paper is presented by Rina Ambalate, Irene Am-is, and Maria Guia Tenerife on May 13, 2024 hereby:

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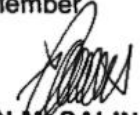
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MA. HELEN S. JARCIA
School Principal II

DEDICATION

This project is heartily dedicated to their beloved parents:

Mr. and Mrs. Am-is

Mr. and Mrs. Ambalate

Mr. and Mrs. Tenerife

We wanted to express our heartfelt gratitude and admiration for the steadfast support and love you provided to your children throughout our research. Your words of encouragement and confidence in our talents have always motivated us to strive for excellence and complete this mission.

This research study is also respectfully dedicated to our research teacher, Mrs. Cassandra Pearl Emperado, whose guidance and mentorship not only provided us with the essential abilities to thrive in research, but also helped us gain confidence to stand on our own.

Acknowledgement

First of all, we would like to express our deepest gratitude to Almighty God for providing us with strength and guidance throughout the research process.

We would like to express our sincere gratitude to Ms. Cassandra Pearl Emperado, our research instructor for her advice knowledge and assistance, which are much appreciated.

We are very appreciative of the respondents who took part in this study. We value every contribution you have made. We are incredibly grateful to our parents for their unwavering love, support, and encouragement.

Finally, we would like to express our gratitude to our adviser, classmates, and peers for their encouragement, discussions, and contributions to the development of this research.

Research abstract

The research aimed to investigate the relationship between smartphone use and academic performance among Grade 12 HUMSS students at Faith in Francisco Ramos National High School. Using a correlational research design and conducting Pearson's R analysis, the study examined the extent of the relationship between smartphone use and academic performance. The findings revealed a medium-positive relationship between smartphone use and academic performance. The results of the Pearson correlation indicated that there was a significant medium-positive relationship between hours spent and grades ($r(28) = .388, p = .034$). Increased smartphone use was associated with higher academic performance among Grade 12 HUMSS students. This result led to the rejection of the null hypothesis and the acceptance of the alternative hypothesis. These findings highlight the importance of considering the relationship between smartphone use and academic performance. However, it is important to note that excessive smartphone use can also pose challenges, such as distraction and reduced focus on academic tasks. Therefore, the research suggests that students should manage their smartphone usage and strike a balance between academic responsibilities and smartphone use. This research contributes to the understanding of the relationship between smartphone use and academic performance among Grade 12 HUMSS students.

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Chapter 1

Background of the Study

In the digital age, the widespread use of smartphones has sparked concerns about their potential influence on academic performance. With more Grade 12 Humss Faith students at Francisco Ramos National High School incorporating smartphones into their daily lives, understanding how this usage relates academic performance is crucial. This study aims to explore the relationship between smartphone use and academic performance among Grade 12 Humss students at Francisco Ramos National High School.

To investigate how smartphone use relates to academic performance among Grade 12 HUMSS Faith students at Francisco Ramos National High School, we'll conduct a survey. This survey will gather data directly from students about their smartphone use and academic Performance. Questions will cover frequency of use, activities on smartphones, and academic performance indicators like grades. After collecting data, we'll analyze it statistically to find any connections between smartphone use and academic performance.

The purposed of this study was to examine how smartphone use correlated with the academic performance of Grade 12 Humss students at Francisco Ramos National High School. By understanding this relationship, educators and policymakers could develop strategies to support students in achieving academic success despite the pervasive influence of smartphones.

Statement of the Problem

This study aimed to determine the relationship between Smartphone use and Academic performance of Grade 12 Humss Faith in Francisco Ramos National High School.

Specifically, it aimed to answer the following queries:

1. How often does students use smartphone?

2. What is the academic performance?
3. Does smartphone use affects the academic performance?

Hypothesis:

Null Hypothesis (H_0). There is no significant relationship between smartphone use and academic performance of Grade 12 HUMSS students at Faith in Francisco Ramos National High School.

Alternative Hypothesis (H_A). There is a significant relationship between smartphone use and academic performance of Grade 12 HUMSS students at Faith in Francisco Ramos National High School.

Scope and Delimitations of the Study

This study aimed to investigate the relationship between Smartphone use an Academic performance of Grade 12 Humss Faith students in the Humanities and Social Sciences (Humss) strand at Francisco Ramos National High School. It will focus on examining how the amount of time spent on social media platforms influences students' academic performance. The study will be conducted exclusively at Francisco Ramos National High School, but only Grade 12 students will be included in the study. The researched would primarily rely on quantitative data analysis to explore correlations between Smartphone and Academic performance, limiting the qualitative aspects of the investigation.

Definition of Terms

The following terms will be used extensively in this study and shall be taken according to the definition given below:

Academic Performance: The success and achievement of Grade 12 HUMSS faith students in their education is measured by different factors, like how active they are in class,

how well they are in class, how well they complete their assignments, and how much they understand the subjects they study.

Relationship: It refers to a relationship between smartphone use and the academic performance of Grade 12 HUMMS Faith students. Refers to how the use of smartphones by students can influence and correlate with their educational achievements and performance.

Smartphone Use: Refers to how Grade 12 HUMMS Faith students interact with their mobile devices. The frequency with which students used their smartphones included activities such as browsing the internet, using social media apps, playing games, and accessing educational resources during the class.

Conceptual Framework

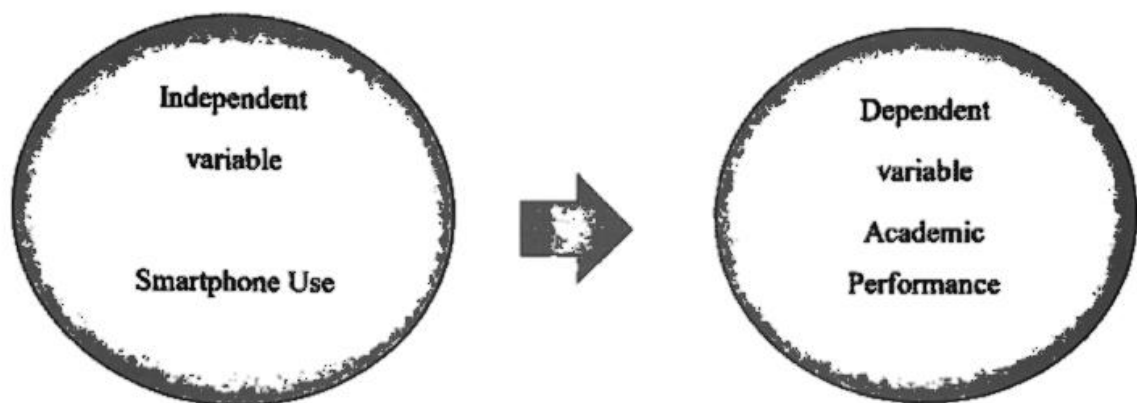


Figure 1. Concept framework

This conceptual framework consist of two variables:

Independent Variable: Smartphone Use: This variable refers to the frequency and duration of smartphone use by Grade 12 HUMSS students. It includes activities such as browsing social media, playing games, watching videos, and using educational apps.

Dependent Variable: Academic Performance: This variable measures the academic achievement of Grade 12 HUMSS students. It includes factors such as grades, test scores, class participation, and overall academic performance.

Significance of the study

This study aimed to provide information and knowledge regarding the relationship between smartphone use and academic performance of grade 12 Humss Faith students in Francisco Ramos National High School. The result of this study will benefited the following:

Students

This study helped the students understand how smartphones impacted their academic performance. The students were informed about their devices and how they could improve time management. Students became more responsible when using their smartphones.

Teachers

Educators could benefit from comprehending how smartphone usage patterns impacted educational outcomes, as it enabled them to adjust their teaching methods and classroom policies accordingly.

Parents/Guardians

This study assisted parents and guardians regarding the connection between their kids' academic achievement and smartphone use. Parents who were aware of this study could help their kids use devices in a responsible and balanced way.

Future researchers

This research study would find this research study beneficial as it established a basis for further examination of this relationship. This allowed them to expand on this study and gain a deeper understanding based on this study.

Chapter 2

Review of Related Literature

In this chapter, it discussed the related literature of the study. The focus of this research study was to determine the relationship between smartphone use and the academic performance of Humss Faith in Grade 12 at Francisco Ramos National High School. The following information below provided the related studies that the researcher used to support the research study.

A lot of studies have demonstrated that smartphones and academic performance are connected, and if there is a significant relationship, there is an impact of using a smartphone on academic performance. But, according to Lacificar (2019), there is no significant correlation between academic performance and smartphone use, but there is a strong negative correlation between daily smartphone usage and academic achievement.

Another study shows how smartphones and academic performance relate to each other. According to Bennett (2020), today's youth, mainly students, rely on education in schools. It's crucial to examine how devices impact their learning. The literature review covers smartphone usage's general effect, its link to academic performance, multitasking impact, using electronic devices (especially smartphones) for learning, teachers incorporating devices into classrooms, and academic smartphone use and performance.

Akuratiya and Medage (2024) found that smartphones significantly impact communication, information acquisition, and education. Students excessively use them for socializing, but most use them for studying and vocabulary acquisition. Despite their benefits, users must balance their use with potential negative effects on academics. This means that smartphones help us in terms of education, but on the other hand, they have a significant negative effect on our academic performance when we can't balance them.

Also, Sapci, Elhai, Amialchuk, and Montag (2021) examine how using smartphones influences college students' grades, using detailed measures instead of self-reported data. This means they discover a clear negative connection between spending more time on smartphones and academic performance, even when other factors are taken into account.

Bajamal et al. (2023) found that too much smartphone use harms students' academic performance, even though smartphones are often used for learning. Overall, spending more time on smartphones can have negative impacts on academic performance. There is a significant relationship between smartphones and academic performance. (Akuratiya & Medage, 2024).

But according to Raibu, Muhammed, Umaru, and Ahmed (2019) investigated the influence of mobile phone usage on academic performance among secondary school students. The study revealed that mobile phone usage significantly and positively increased academic performance among male and female senior secondary school students.

The researchers looked to see if there was a significant relationship between smartphone use and the academic performance of the students. Most studies discuss how smartphones can help students in terms of communication, learning, socializing, and education, but they also have a positive and negative impact on their academic performance. Overall, the researchers conclude that there is a significant relationship between smartphone use and academic performance.

Chapter 3

Research Methodology

This chapter presented the research methods of the study. It includes discussion on the research design and research methods covering the research environment, research subjects, sampling techniques, instrumentation, data gathering techniques, and statistical treatment.

Research Design

According to Scribbr, correlational design is a research design that investigates the relationships between variables without the researcher controlling or manipulating them. The researcher aimed to explore the link between smartphone use and academic performance among Grade 12 HUMSS students at Francisco Ramos National High School. Using a correlational design, data on smartphone usage frequency and duration will be collected via self-report questionnaires, alongside academic performance records from the school. Ethical considerations will be ensured, and statistical analysis, primarily employing Pearson correlation coefficients, will be conducted.

Research Locale

The study would be conducted at Francisco Ramos National High School. The researcher selected this school because the respondents are currently studying there. There are limitations to collecting data; other students will not participate in this study; only the students in grade 12 have the responsibility to participate in this study.



Research Respondents

The researched respondents were the students of Grade 12 Humss Faith at Francisco Ramos National High School. Other students will not be allowed to be respondents in this study.

Sampling Techniques

The method of choice of the researcher was the random sampling technique, which is a random and impartial way of choosing a subset of observations or things from a wider population. There is an equal chance for every respondent in the population to be in the sample.

According to Scribbr, a simple random sample is a randomly selected subset of a population. It is the most straightforward and easiest method of probability sampling, as it involves a single random selection and requires little advance knowledge about the population.

The target population of this research consists of 42 students who are currently enrolled in Francisco Ramos National High School in the section of 12 Humss Faith, but the target respondents was 30 respondents only. The researcher will first collect the names of 12 Humss Faith, then write their names on a piece of paper and put it in a box. After that, the researcher will begin to select random respondents that will answer the researcher's prepared questionnaires.

Instruments

The researched instruments used for this study is Close-ended questionnaire specifically semantic differential. Respondents are typically provided with a set of predetermined response options for each question. They are required to select the most appropriate response from the given options. The parts of the research instrument are name, direction, questions section and options. There are 3 items per sub factor or what we called 3 total items.

Data Gathering Procedure

Before collecting the data, the researcher prepares the research questions to be answered and determines the sample size of Grade 12 HUMSS faith students. Then, ask for their consent so the researcher will have permission.

While collecting the data, the researchers would give a brief description of answering research questions to the respondents, who are Grade 12 HUMSS faith students. The researcher would ensure that the respondents had a clear understanding of the questionnaire and its purpose.

After the completion of the questionnaire, the researcher would collect and classify the returned questionnaires. The data would be carefully analyzed and interpreted based on the responses to research questions.

Chapter 4

Presentation, Analysis and Interpretation of Data

In this chapter, the researchers presented the interpretation of the data collected and the findings based on the correlation between smartphone use and the academic performance of Grade 12 Humss students.

Table 1. The hours time spent and the academic performance of the Grade 12 HUMSS Faith students.

Hours spent	Academic Grades
8	94
8	95
7	91
7	90
6	88
7	94
7	88
4	90
8	91
3	85
5	88

3	87
1	87
4	89
2	88
5	86
6	86
9	88
7	89
4	89
2	87
2	86
3	89
2	88
1	88
3	87
5	85
3	89
7	90

This table shows the relationship between the hours spent and the academic grades of the students. Based on the findings, it was revealed that there was a significant, medium positive relationship between smartphone use and academic performance using Pearson R analysis.

The result will be given in the Table below.

Parameter	Value
Pearson correlation coefficient (r)	0.3883
r^2	0.1508
P-value	0.03398
Covariance	2.6253
Sample size	30
Statistic	2.2295

Result of the Pearson correlation indicated that there is a significant medium positive relationship between hour spent and academic grades, ($t(28) = .388, p = .034$).

Chapter 5

Conclusion and Recommendation

This chapter presented the conclusion and recommendation of the relationship between smartphone use and academic performance of Grade 12 HUMSS Faith in Francisco Ramos National High School.

Summary of finding

Research Question 1. How often do you use your smartphone for activities like social media, or browsing the internet?

The frequency of hours spent by grade 12 students using smartphones for activities like social media or browsing the internet is often (4-8 hours).

Research Question 2. What grades do you typically receive in your class?

The academic grades of grade 12 students most falls under very satisfactory 85-90%.

Research Question 3. Does smartphone use affects your grades?

Most of the grade 12 HUMSS Faith students using smartphones leads to higher grades.

Conclusion

As we conclude, based on the given findings of this research, it revealed a significant medium positive relationship between smartphone use and academic performance through the use of correlation Pearson r analysis, it shown there that there is a medium positive relationship, so we accept the alternative hypothesis that indicate there is a relationship between the Smartphone use and academic performance and rejected the null hypothesis. Therefore, we conclude that there is a relationship between smartphone use and academic performance of the students. This study adds to what we already know and determine the relationship between the

two variables. It provides valuable insights that can help teachers and schools make better decisions about how to use smartphones in education.

Recommendation

Based on the findings, the researchers endorse the following recommendations:

- 1.) In our survey questionnaire, we found that the responses of the respondents indicated that smartphone use could lead to both lower and higher grades. Therefore, we recommended that students should have balanced their smartphone use to minimize distractions and utilize it for educational purposes
- 2.) In our findings, it was revealed that smartphone use led to higher grades and academic performance. Therefore, we recommended using the smartphone more in a responsible way.
- 3.) Educators and parents should have prioritized teaching students about responsible smartphone use.
- 4.) We recommended prioritizing ethical considerations throughout the data collection and analysis process.

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Appendix A
(Permission to conduct the study)

April 12, 2024

Ma. Helen S. Jarcia

School Principal

Francisco Ramos National High School

Dear Ma'am

Greetings of peace!

In partial fulfillment of our requirements for our subject 31's (Inquiries, Investigation and Immersion), we grade 12 students in section 12 faith in Francisco Ramos National High School (formerly Buayan National High School). We namely, Irene Am-is, Maria Guia Tenerife and Rina F. Ambalate, would like to ask formally for a permission to conduct a research study entitled "The Relationship between Smartphone use and Academic performance of Grade 12 HUMSS Faith in Francisco Ramos National High School".

The purpose of this study is to determine the relationship between smartphone use and academic performance of grade 12 Faith students. The researchers addresses this issue with the research methodology survey questionnaire and academic record that will be analyzed to understand the relationship between smartphone use and academic performance.

We believe that you are with us to finish the requirements for us to comply for our subject. Thank you for your time and attention to this matter. Your approval to conduct this study will be greatly and highly appreciated.

Recommending Approval:

CASSANDRA PEARL EMPERAD

Teacher

Approved by:

MA. HELEN S. JARCIA

School Principal

April 12 2024

Ma.Helen S. Jarcia

School Principal

Francisco Ramos National High School

Dear Ma'am,

Greetings of peace!

In partial fulfillment of our requirements for our subject 3I's (Inquiries, Investigation and Immersion), we grade 12 students in section 12 Faith in Francisco Ramos National High School (formerly Buayan National High School). We namely, Irene Am-is, Maria Guia Tenerife and Rina Ambalate, would like to ask formally for a permission to conduct a research study entitled "The Relationship between Smartphone use and Academic performance of Grade 12 HUMSS Faith in Francisco Ramos National High School".

The purpose of this study is to determine the relationship between smartphone use and academic performance of grade 12 Faith students. The researchers address this issue with the research methodology survey questionnaire and academic record that will be analyzed to understand the relationship between smartphone use and academic performance.

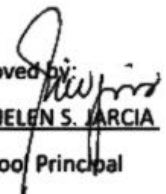
We believe that you are with us to finish the requirements for us to comply for our subject. Thank you for your time and attention to this matter. Your approval to conduct this study will be greatly and highly appreciated.

Recommending Approval:


CASSANDRA PEARL IMPERADO

Teacher

Approved by:


MA. HELEN S. JARCIA

School Principal

Appendix B

Research Instrument

This researcher used the research design (Correlational design) and Semantic Differential in research instrument to determine the relationship between smartphone use and academic performance of Grade 12 HUMMS Faith in Francisco Ramos National High School.

Directions: Below, you will find a series of questions. Please read each questions carefully and put a check in the box that corresponds to the most accurate answer.

1.) How often do you use your smartphone for activities like social media, texting, or browsing the internet?

- | | |
|--|--|
| <input type="checkbox"/> Always (8 hours above) | <input type="checkbox"/> Sometimes (1-3 hours above) |
| <input type="checkbox"/> Often (3-8 hours above) | <input type="checkbox"/> Never use |

How many hours do you spend using your smartphone? _____

2.) What grades do you typically receive in your class?

- | | |
|---|--|
| <input type="checkbox"/> Outstanding (90-100) | <input type="checkbox"/> Satisfactory (80-84) |
| <input type="checkbox"/> Very Satisfactory (85-89) | <input type="checkbox"/> Fairly Satisfactory (75-79) |
| <input type="checkbox"/> Did not meet the expectations below 75 | |

What is your academic grades? _____

3.) Doe smartphone use affect your grades?

- | | |
|--|---|
| <input type="checkbox"/> Smartphone use leads to higher grades | <input type="checkbox"/> Smartphone use leads to lower grades |
|--|---|

Curriculum Vitae

Name : Rina F. Ambalate

Date of Birth: March 15, 2006

Place of Birth: Lumbayao, Kabasalan Zamboanga Sibugay

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Parents: Gina F. Ambalate

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Educational Background

Senior High School (School): Francisco Ramos National High School

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(Strand/Track) : HUMSS

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Curriculum Vitae

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Senior High School (School): Francisco Ramos National High School

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Elementary (School): Trento West Central Elementary Sped Center

(School Address): Poblacion, Trento Agusan Del Sur

(Month & year graduated): 2017



Curriculum Vitae

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Date of Birth : October 20, 2005

Place of Birth : Bato, Siay Zamboanga Sibugay

Present Address: Bato, Siay Zamboanga Sibugay

Parents: Marites E. Tenerife

: Jeremiaas P. Tenerife



Educational Background

Senior High School (School): Francisco Ramos National High School

(School Address): Concepcion, Kabasalan, Zamboanga Sibugay

(Strand/Track): HUMSS

Junior High School (School): Francisco Ramos National High School

(School Address): Concepcion, Buayan, Kabasalan, Zamboanga Sibugay

(Month & year graduated): 2022

Elementary (School): Bato Elementary School

(School Address): Bato, Siay Zamboanga sibugay

(Month & year graduated): 2017