Correlation of Smartphone Usage and Academic Interest among College Students in St Mary's College of Bansalan Inc.

Ludevina F. Quibuen[1], Ericka Del Rosario[2], Jovanne Tapia[3], Julz Michael Escobar[4], Sandy Genovia[5], Jhon Brian Cantil[6]

[12345]*Student, Bachelor of Science in Information Technology, St. Mary's College of Bansalan Inc.*
[6]*Program Head, Bachelor of Science in Information Technology, St. Mary's College of Bansalan Inc.*

Abstract - **There has been a lot of research done on smartphone use among college students. Although various research have been conducted to investigate the links between mobile phone use and academic ability, the results have been varied. As a result, the primary purpose of this study was to completely synthesize existing research to evaluate the relationship between smartphone usage and Academic Interest among college students at St. Mary's College of Bansalan Inc. During the data collection phase of this investigation, two adapted questionnaires were used. The survey was digitally conducted to 100 college students in five different SMCBI courses, namely BSIT, BSHM, BSBA, BSED, and BEED, using the Google Forms program. A statistician analyzed and interpreted the acquired data. The interpreted data were presented and discussed further by the researchers in a concise manner.**

The survey results showed that the level of Smartphone usage is high and that the level academic interest is also high. There is no significant difference on the level of both of Smartphone Usage and Academic Interest when grouped according to Gender, Age Group, Year Level and Program.That the relationship between variables, Smartphone Usage and Academic Interest has an r=523, which implies that it has Moderate Positive Relationship.

Keywords— **smartphone usage, academic interest, quota sampling, correlation study, St. Mary's College of Bansalan Inc.**

I. INTRODUCTION

Most of us didn't have cell phones 20 years ago. A smartphone was unheard of 15 years ago. We take it for granted that we can book and change appointments, access the world's information, map our movements, and much more in the palm of our hands, thanks to the widespread adoption of smartphone technology. In this regard, the future has here. We're still waiting for the hover boards promised in Back to the Future Part II's 2015 scenario, but smartphones have well outpaced Captain Kirk's communicator from the original Star Trek. Fast forward nearly a decade, and IBM introduced the "Simon" personal communicator, a device with an early touchscreen and the capacity to send and receive emails and faxes, as well as serve as a pager and perform other smartphone-like features. In mid-1994, it was offered for $1099 without a contract. Other firms and operating systems would try to compete in the market, but RIM emerged as the dominating player in the smartphone space immediately after the millennium. After making devices more equivalent to advanced pagers, a built-in mic first debuted in a RIM smartphone in 2003 with the introduction of the BlackBerry 7230. RIM introduced the Curve 8300, which might be regarded the peak of physical keyboard-based smartphones, several generations later, in 2007. [1]

The number of mobile phone users has been rapidly increasing in our modern period, across all socioeconomic and age groups. University students, on the other hand, have been designated as one of the largest and most important target customers, as well as the most active smartphone users. [2] Found that generation Z is the most frequent smartphone users although this group disagreed. Since the purpose of this study is to identify problematic smartphone use amongst university students, hence, the number of times spent using smartphones was measured to identify the level of student's mobile addiction in higher education.

The problem with students' excessive usage of their mobile phones is that it leads to mobile addiction, which leads to poor academic performance. According to [3], excessive use of mobile applications such as Facebook might lead to addiction. It also lowers academic grades. Further research into the key reasons why university students become addicted to cellphones has discovered that, from a student's perspective, smartphones can give a variety of benefits. They'll have fun and be relieved of academic pressure [4]

Looking at the positive side of mobile phones, it is undeniable that they may be employed as a learning device in higher education. Students' achievement increased dramatically when they used their smartphones as mobile learning devices, according to [5]. In a different case study, students were discovered taking pictures of notes taught in class with their smartphones. Similarly, [6] discovered that the students in their study thought smartphones were tools that helped them improve their academic performance. [7] Explained that students used their smartphones to download and watch online lectures as well as read e-books and slides in his study. These activities were discovered to have a good impact.

Since began to think about encouraging curiosity, researchers have identified one of the key aims of education as the role of student interest in academic success was explored accomplishment. It is well known that there is a high level of interest in encourages participation, efficiency, effort, and perseverance in learning.

As a result, the current crisis in our educational sector, as well as the abrupt transition in learning platforms, has had a variety of repercussions on student learning. This study examines the relationship between smartphone usage and academic interest among students at Bansalan's St. Mary's College. The study will also look into the relationship between smartphone usage and academic interest among college students at St. Mary's College in Bansalan.

Theoretical framework

The Smartphone Usage is anchored to the Smartphone Addiction: A Review of Themes, Theories and Future Research Directions developed by Richard Boaten, etc. [8] and Academic Interest is anchored to the Theory of the Ecology of Human Development proposed by Bronfenbrenner. [9]

According to [8] A smartphone is a hybrid device that combines a Personal Digital Assistant (PDA) and a mobile phone. It is a device that allows users to view videos, voice, and image conversations. They're also utilized for gaming, shopping, and gathering information. Smartphone usage has evolved into a societal phenomenon an occurrence that occurs in a social environment and perceptions of things, services, and people have an impact social conventions As the use of smartphones becomes more widespread, compulsive and addictive behaviors have become a significant source of concern for all stakeholders. Smartphone addiction involves excessive interactions with a smartphone device with a special focus on the functions it provides and the applications accessed on it. Anecdotal evidence on instances of compulsive behaviors in the use of smartphones includes checking, habits, phantom vibrations, a cycle of responsiveness, and loss of impulse.

On the other hand, [9] said that the interdependence of the person-environment attributes, the structure of the environmental setting, and the processes that may be observed between them must be considered. Simply put, when a person transitions from one environment to another, he absorbs the psychological effects of the first environment and transfers them to the second.
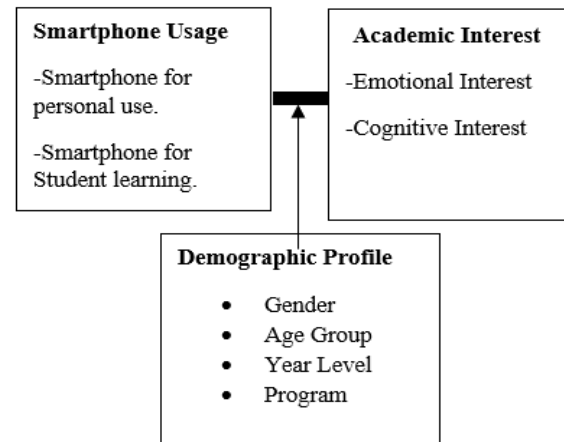
Conceptual Framework

Figure 1: Conceptual Framework of the Study

The study's key variables and their corresponding indicators are shown in the conceptual framework above. It depicts how the independent and dependent variables may be linked in relation to the moderating variable. The researchers of this present study Smartphone usage as their independent variable. It has two indicators, namely, smartphone for personal use and smartphone for student learning indicated by [10] and [11]. Meanwhile, Academic Interest is the dependent variable which indicators, namely, Emotional in Cognitive Interest as indicated by [12] continually, the moderating variable is the Demographic Profile that has four indicators, namely, Gender, Age Group, Year Level, and Program. The purpose of this moderating to help the interpretation of the correlation between the Smartphone usage and Academic Interest

Research Questions

RQ1: What is the profile of the respondents in terms of?

    a. Gender
    b. Age Group
    c. Year Level
    d. Program

RQ2: What is the level of Smartphone usage among college students in St. Mary's College of Bansalan on:

    a. Smartphone for Personal Use
    b. Smartphone for Student Learning

RQ3: What is the level of Academic Interest among college students in St. Mary's College of Bansalan

    a. Emotional Interest
    b. Cognitive Interest

RQ4: Is there a significant difference in the level of Smartphone usage among college students is St. Mary's College of Bansalan Inc based on:

    a. Gender
    b. Age group

c. Year level
d. Program

RQ5: Is there a significant difference in the level of Academic Interest among college students is St. Mary's College of Bansalan Inc based on

a. Gender
b. Age group
c. Year level
d. Program

RQ6: Is there a significant relationship between the Smartphone usage and academic interest among College Students in St. Mary's College of Bansalan, Inc?

Null Hypothesis

1. There is no significant difference in the level of Smartphone Usage among college students is St. Mary's College of Bansalan Inc.
2. There is no significant difference in the level of Academic Interest among college students is St. Mary's College of Bansalan Inc.
3. There is no significant difference between the Smartphone usage and academic interest among College Students in St. Mary's College of Bansalan, Inc.

II. METHODOLOGY

2.1 Research Design

The study's researchers employed a Correlational Research Design as it will investigate relationships between Smartphone Usage and Academic Interest among the college student is St. Mary's College of Bansalan Inc. without the researcher controlling or manipulating any of them. The intensity and/or direction of the relationship between two (or more) variables is represented by a correlation. A correlation might have either a positive or negative direction.

Research Locale

The research carried out at Saint Mary's College of Bansalan, Incorporated, which is located at Dahlia St. Poblacion Uno, Bansalan, Davao del Sur. The school provides both primary and secondary education. Furthermore, the school's basic education section includes elementary, junior, and senior high school students. Tertiary education, on the other hand, is comprised of five programs: Bachelor of Elementary Education, Bachelor of Secondary Education, and Bachelor of Science in Business Administration, Bachelor of Science in Hospitality Management, and Bachelor of Science in Information Technology.

Participants of the Study

In every study, there should be respondents. The participants of this study are college students of St. Mary's College of Bansalan Inc. (SMCBI). The student should be 19 above currently enrolled to the said institute and must have their own smartphone in order for them to be qualified in the research.

Sampling Techniques

Quota sampling is a non-probability sampling strategy in which researchers create a sample of people who represent a population. In this research, the researchers chose Twenty (20) college students in every program who are currently studying at St. Mary's College of Bansalan Inc. a total of 100 students since the said institution offered 5 programs in college. These individuals are chosen by researchers based on unique characteristics or attributes. They decide and create quotas in order for market research samples to be useful in data collection. These samples have the potential to be generalized to the full population. Only the interviewer's or researcher's knowledge of the population used to determine the final subgroup.

Statistical Treatments

The statistical tools to be utilized are listed below.

1. Relative Frequency - is a term used to describe how frequently something happens. This device utilized to specify Gender, Age Group, and Year.
2. Analysis of Variance - This tool used to describe the significant differences of the levels of the Smartphone Usage and the Academic Interest when analyzed by Gender, Age Group, Year Level, and Program.
3. Pearson r. This tool used to describe the significant relationship between the Smartphone and Academic Interest among college students is St. Mary's College of Bansalan Inc.

Data Collection Procedure

In order to perform the study about the Correlation between Smartphone Usage and Academic Interest among College Students at St. Mary's College of Bansalan Inc., the researchers went through the following stages.

1. The responders got a letter of consent requesting their permission to perform the study.
2. When the researcher receives authorization, he or she will begin administering the questionnaire to the respondents either face to face or over the Google Forms system.
3. The information gathered counted, processed, and analyzed using statistical software.

Research Instrument

The researcher designed a survey questionnaire for this analysis. In this investigation, the researchers employed primary data, which included distributing a structured questionnaire via Google Form to college students at St. Mary's College of Bansalan Inc.

The first variable, Smartphone Usage, was derived from data collected in Noah Darko-[10] Adjei's paper titled

"The Use and Effect of Smartphones in Students' Learning Activities: Evidence from the University of Ghana, Legon." According to the report, smartphone usage is progressively becoming a compelling learning tool used to improve teaching and learning in distant education. Its use provides flexible course delivery, allows learners to access online learning platforms, course contents, and engage digitally. In addition to the first research, the first variable obtained data from Russell Bennett's [11] paper titled "Smartphone Usage and Academic Performance," which indicated that today's kids are acquiring, or gaining access to, cellphones at younger and younger ages.

Furthermore, the second variable, Academic interest, where the questionnaire was based on the work of Eddie Ramos and others [13], indicated that numerous literatures have explored that a student's sociality in any context predicts his academic functioning, particularly his interest in schooling.

The questions were prepared in Google Forms, and the link to the Google Form will be sent to the responder through their Gmail account or Messenger. The items were changed to match the research. After consulting with an expert, the indicators were thoroughly examined and modified.

The scale below used to measure the Smartphone Usage:

Range of Means	Descriptive Equivalent	Interpretation
4.20 – 5.00	Very High	The items related to Smartphone usage are always manifested
3.40 – 4.19	High	The items related to Smartphone usage are oftentimes manifested.
2.60 – 3.39	Moderate	The items related to Smartphone usage are sometimes manifested
1.80 – 2.59	Low	The items related to Smartphone usage are seldom manifested.
1.00 – 1.79	Very Low	The items related to Smartphone usage are not manifested at all.

The scale below used to measure the Academic Interest:

Range of Means	Descriptive Equivalent	Interpretation
4.20 – 5.00	Very High	The items related to Academic Interest are always manifested
3.40 – 4.19	High	The items related to Academic Interest are oftentimes manifested.
2.60 – 3.39	Moderate	The items related to Academic Interest are sometimes manifested
1.80 – 2.59	Low	The items related to Academic Interest are seldom manifested.
1.00 – 1.79	Very Low	The items related to Academic Interest are not manifested at all.

Ethical Considerations

When conducting a survey, ethical considerations are critical, and it should be done in a pleasant manner. The respondent's safety comes first, especially given when we're dealing with an unanticipated global pandemic. Respondents are not forced to complete the survey or read the questions; rather, they voluntarily acknowledge and adhere to the consent given to them prior to receiving any data gathering. Meanwhile, the response is widely appreciated and valued for humbly providing both details and directions. Furthermore, the researchers' data will be kept confidential and will always be anonymous to people who take part in the survey. If the outcome is in our hands, we will be completely transparent.

III. RESULTS AND DISCUSSION

This section contains the discussions of the outcomes of the statistical treatments of the information gathered.

Smartphone usage

Resulting output contains a case processing summary which is shown to the first table where it stated that all cases under the Smartphone usage was all valid.

Table 1: Case Processing Summary			N	%
Cases		Valid	100	100.0
		Excludedª	0	.0
		Total	100	100.0
a. Listwise deletion based on all variables in the procedure.				

The tables shown below was the Reliability statistics, item statistics and scale statistics Under the Smartphone usage where the general constancy of a metric is referred to as its dependability.

Table 2: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.926	.929	20

Table 3: Item Statistics

	Mean	Std. Deviation	N
SU_PU1	4.0100	.84680	100
SU_PU2	3.6100	.83961	100
SU_PU3	4.1100	.86334	100
SU_PU4	4.4600	.90364	100
SU_PU5	4.4100	.77973	100
SU_PU6	3.5000	1.12367	100
SU_PU7	4.2200	.92747	100
SU_PU8	3.2100	1.24961	100
SU_PU9	3.6200	1.15277	100
SU_PU10	4.2300	.90849	100
SU_SL1	4.2000	.88763	100
SU_SL2	4.4000	.79137	100
SU_SL3	4.3900	.90893	100
SU_SL4	4.3100	.97125	100
SU_SL5	4.3000	.84686	100

SU_SL6	4.1500	.96792	100
SU_SL7	4.1800	.97835	100
SU_SL8	4.2900	1.01797	100
SU_SL9	4.2600	1.01125	100
SU_SL10	3.6600	.83145	100

Table 4: Scale Statistics

Mean	Variance	Std. Deviation	N of Items
81.5200	149.909	12.24372	20

The instrument for SMARTPHONE USAGE has an EXCELLENT level of Internal Consistency.

Academic interest

In this variable we can also see the result of case processing summary under the Academic Interest which is also stated that all cases were valid.

Table 5:Case Processing Summary

		N	%
		N	%
Cases	Valid	100	100.0
	Excluded[a]	0	.0
	Total	100	100.0
a. Listwise deletion based on all variables in the procedure.			

The tables shown below was the Reliability statistics, item statistics and scale statistics under the Academic Interest where the general constancy of a metric is referred to as its dependability.

Table 6: Reliability Statistics

	Cronbach's Alpha Based on Standardized Items	N of Items
.944	**.945**	**16**

Table 7: Item Statistics

	Mean	Std. Deviation	N
AI_EI1	3.9100	.86568	100
AI_EI2	3.8100	.72048	100
AI_EI3	3.8100	.82505	100
AI_EI4	3.9900	.75872	100
AI_EI5	4.0300	.79715	100
AI_EI6	3.7800	.70467	100
AI_EI7	3.8300	.76614	100
AI_EI8	4.0300	.71711	100
AI_EI9	4.1500	.67232	100
AI_CI1	4.0000	.68165	100
AI_CI2	4.0700	.71428	100
AI_CI3	4.2100	.76930	100

AI_CI4	4.1600	.74833	100
AI_CI5	4.1700	.72551	100
AI_CI6	4.2700	.66447	100
AI_CI7	4.0800	.72027	100

Table 8: Scale Statistics

Mean	Variance	Std. Deviation	N of Items
64.3000	76.515	8.74729	16

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

The instrument for ACADEMIC INTEREST has an EXCELLENT level of Internal Consistency.

Table 9. Profile of the Students

Char (n=100)	Level	Frequency	%
Gender	Male	45	45.0
	Female	55	55.0
Age Group	below 19 yrs old	5	5.0
	19-25 yrs old	79	79.0
	26-30 yrs old	12	12.0
	31-40 yrs old	4	4.0
Year Level	1st year	22	22.0
	2nd year	17	17.0
	3rd year	27	27.0
	4th year	34	34.0
Program Course	BSIT	41	41.0
	BSBA	26	26.0
	BSHM	12	12.0
	BSED	11	11.0
	BEED	10	10.0

The first study question requests the demographic profile of the St. Mary's College of Bansalan, Inc. student responders. In response, Table 9 displays the requested data.

Table 10. Level of Usage of Smartphone Usage (n=100)

Indicators	$\bar{x}$	SD	Description
SP for Personal Use	4.07	.612	High
SP for Student Learning	4.21	.736	Very High
Total	3.94	.607	High

Range of mean	Description interpretation
1.00 – 1.80	Very low
1.81 – 2.60	Low
2.61 – 3.40	Moderate
3.41 – 4.20	High
4.21 – 5.00	Very high

The level of Smartphone Usage for Personal use is 4.07 with a standard deviation of .612 which is high and also the level of Smartphone Usage for Student Learning is 4.21 with the standard deviation of .736 which result to a very high description. Therefore the Smartphone usage among college students in St. Mary's College of Bansalan, Inc is 3.94 with a standard deviation of .607. This means that Smartphone Usage among college students in St. Mary's College of Bansalan, Inc. manifested.

Table 11. Level of Academic Interest Usage (n=100)

Indicators	$\bar{x}$	SD	Description
Emotional Interest	3.93	.573	High
Cognitive Interest	4.13	.575	High
Total	4.03	.547	High

Range of mean	Description interpretation
1.00 – 1.80	Very low
1.81 – 2.60	Low
2.61 – 3.40	Moderate
3.41 – 4.20	High
4.21 – 5.00	Very high

The level of Academic Interest for Emotional Interest is 3.93 with a standard deviation of .573 which is high and also the level of Academic Interest for Cognitive Interest is 4.13 with the standard deviation of .575 which result to high description. The level of Academic Interest among college students in St. Mary's College of Bansalan, Inc is 4.03 with a standard deviation of .547. This means that Academic Interest among college students in St. Mary's College of Bansalan, Inc. evident.

You may use this parameter limits for the qualitative description.

4.21 – 5.00- Strongly manifested
3.41 – 4.20 – Manifested
2.61 – 3.40 – Somewhat manifested

1.81 – 2.60 – Not manifested
1.00 – 1.80 – Strongly Not Manifested

Table 12. Significant Difference on the level of Smartphone Usage when grouped according to Gender, Age Group, Year Level and Program (n=100)

Test Variables	F	Sig.	Decision
Gender	1.128	.332	Accept Ho
Age Group	.950	.565	Accept Ho
Year Level	1.283	.189	Accept Ho
Program	.680	.904	Accept Ho

Since p-values for Gender, Age Group, Year Level, and Program are .332, .565, .189 and .904 > 0.05, respectively, then we do not reject the null hypothesis. There is no significant difference on the level of Smartphone Usage when grouped according to Gender, Age Group, Year Level and Program.

Table 13. Significant Difference on the level of Academic Interest when grouped according to Gender, Age Group, Year Level and Program (n=100)

Test Variables	F	Sig.	Decision
Gender	1.006	.505	Accept Ho
Age Group	1.225	.262	Accept Ho
Year Level	2.041	.013	Reject Ho
Program	.784	.802	Accept Ho

Since p-values for Gender, Age Group, and Program are .505, .262, and .802 > 0.05, respectively, then we do not reject the null hypothesis. There is no significant difference on the level of Academic Interest when grouped according to Gender, Age Group, and Program. However, when grouped according to Year Level, the p-value .013 < 0.05, then we accept the null hypothesis. We can assume that there is a significant difference on the level of Academic Interest when grouped according to Year Level.

Table 14. Correlations Relationship Between Smartphone Usage and Academic Interest (n=100)

Variables	r-value	P-value	Decision
Smartphone Personal Usage			
x Emotional Interest Ho	.414	.000	Reject
x Cognitive Interest Ho	.327**	.001	Reject
Smartphone Student Learning			
x Emotional Interest Ho	.534**	.000	Reject
x Cognitive Interest Ho	513**	.000	Reject
Smartphone Usage **Ho**	**.523****	**.000`**	**Reject**
x Academic Interest			

r = .414, .327, .534. .513, .523 p-values = .000, .001 **p<0.01*

Range of r-value	Description Interpretation
0.00 to ±0.20	Negligible Positive Relationship
0.21 to ±0.40	Weak Positive Relationship
0.41 to ±0.60	Moderate Positive Relationship
0.61 to ±0.80	Strong Positive Relationship
0.81 to ±0.99	Very High/Very Strong Positive Relationship
±1.00	Perfect Relationship

Table 14 shows the positive correlations between Smartphone Usage and Academic Interest. Since p-values are all .000 and 0.001 <0.01, then we reject the null hypothesis. There is a significant relationship between Smartphone Usage and Academic Interest. With this positive correlation, this implies that when the Smartphone Usage increases, it can be assumed that Academic Interest also increases. On the strength of relationship between the indicator Personal Usage and Emotional Interest, r=.414 indicates Moderate Positive Relationship. For Personal Usage and Cognitive Interest, r=.327 indicates Weak Positive Relationship. For indicator Student learning correlate with indicators Emotional Interest and Cognitive Interest with r=values .534 and 513 respectively, these imply Moderate Positive Relationship.

Overall, on the strength of relationship between variables, Smartphone Usage and Academic Interest has an r=523, which implies that it has Moderate Positive Relationship.
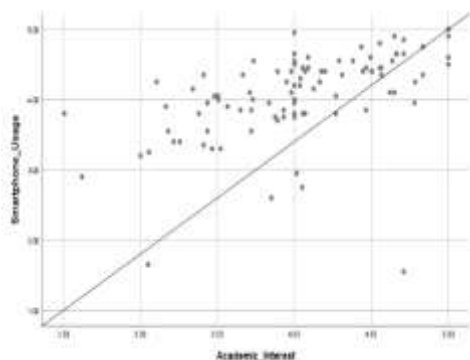

Figure 1. Scatterplot displaying the strength, direction, and form of the relationship between Smartphone Usage and Academic Interest among college Students in St. Mary's College of Bansalan Inc.

SPSS RESULTS

Gender		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	45	45.0	45.0	45.0
	Female	55	55.0	55.0	100.0
	Total	100	100.0	100.0	

Age Group		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	below 19 years old	5	5.0	5.0	5.0
	19-25 years old	79	79.0	79.0	84.0
	26-30 years old	12	12.0	12.0	96.0
	31-40 years old	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

Program Course		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	BSIT	41	41.0	41.0	41.0
	BSBA	26	26.0	26.0	67.0
	BSHM	12	12.0	12.0	79.0
	BSED	11	11.0	11.0	90.0
	BEED	10	10.0	10.0	100.0
	Total	100	100.0	100.0	

Year Level		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1st year	22	22.0	22.0	22.0
	2nd year	17	17.0	17.0	39.0
	3rd year	27	27.0	27.0	66.0
	4th year	34	34.0	34.0	100.0
	Total	100	100.0	100.0	

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation
Personal_User	100	1.50	5.00	3.9380	.60749
Student_Learning	100	1.60	5.00	4.2140	.73636
Smartphone_Usage	100	1.55	5.00	4.0760	.61219
Valid N (listwise)	100				

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation
Emotional_Interest	100	2.44	5.00	3.9265	.57284
Cognitive_Interest	100	2.57	5.00	4.1373	.57547
Academic_Interest	100	2.51	5.00	4.0319	.54685
Valid N (listwise)	100				

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Gender	Between Groups	11.236	42	.268	1.128	.332
	Within Groups	13.514	57	.237		
	Total	24.750	99			
Age Group	Between Groups	12.658	42	.301	.950	.565
	Within Groups	18.092	57	.317		
	Total	30.750	99			
ProgramCourse	Between Groups	60.629	42	1.444	.680	.904
	Within Groups	121.081	57	2.124		
	Total	181.710	99			
Year Level	Between Groups	64.004	42	1.524	1.283	.189
	Within Groups	67.706	57	1.188		
	Total	131.710	99			

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Gender	Between Groups	16.281	65	.250	1.006	.505
	Within Groups	8.469	34	.249		
	Total	24.750	99			
AgeGroup	Between Groups	21.550	65	.332	1.225	.262
	Within Groups	9.200	34	.271		
	Total	30.750	99			
Program Course	Between Groups	109.013	65	1.677	.784	.802
	Within Groups	72.697	34	2.138		
	Total	181.710	99			
YearLevel	Between Groups	104.843	65	1.613	2.041	.013
	Within Groups	26.867	34	.790		
	Total	131.710	99			

IV. CONCLUSIONS AND RECOMMENDATIONS

Conclusions:

Based on the findings of this research study, the

Following conclusions are drawn:

1. The results were able to show the demographic profile of the respondents in terms of gender, age group, year level, and program. Importantly, there are 100 college students in different courses who have responded.

2. The results were able to show a High level of Smartphone usage among the college students in St. Mary's College of Bansalan.

3. The results were able to show a high level of academic interest among the college students in St. Mary's College of Bansalan.

4. The results were able to show no significant difference on the level of Smartphone Usage when grouped according to Gender, Age Group, Year Level and Program.

5. The results were able to show no significant difference on the level of Academic Interest when grouped according to Gender, Age Group, and Program. However, when grouped according to Year Level, the p-value $.013 < 0.05$, then we accept the null hypothesis. We can assume that there is a significant difference on the level of Academic Interest when grouped according to Year Level.

6. On the strength of relationship between variables, Smartphone Usage and Academic Interest has an r=523, which implies that it has Moderate Positive Relationship.

Recommendations:

The following recommendations are generated with the integration of the findings of this present study.

1. Parents can strengthen their rules around their children's smartphone use to reduce the likelihood of them engaging in anti-social behaviour,

2. Academic authorities may hold seminars to educate students about the positive and negative effects of smartphones in their academic lives.

3. Guidance counsellors may provide counseling to those who are addicted to using their smartphones for other purposes and are found to be academically disturbed.

4. Teachers may devise interventions that will impact the emotional and cognitive interests of students to increase their overall level of academic interest.

ACKNOWLEDGEMENT

REFERENCES

[1]. J. Cook, "Smartphone History: From the First Smartphone to Today," December 17, 2021.

[2]. A. B. N. H. J. Hafidha Suleiman Al-Barashdi, "Smartphone Addiction among University," Journal of Scientific Research & Reports, vol. 4(3): , no. ISSN: 2320-0227, pp. 210-225, 2015.

[3]. A. C. K. Paul A. Kirschner, Running head: FACEBOOK® AND ACADEMIC PERFORMANCE, Open University of the Netherlands, The Ohio State University, 2021.

[4]. A. I. M. ,. Y. U. H. T. A. Haruna Rabiu, "Impact Of Mobile Phone Usage On Academic Performance Among Secondary School Students In Taraba State, Nigeria," ESJ January Edition , vol. 12, p. 1, 2016.

[5]. A. A. Gideon, " Influence of Time-on-phone on undergraduates academic achievement in," American Journal of Educational Research, vol. 5, no. 5, pp. 564 - 567, 2017.

[6]. B. M. A. &. N. A. Woodcock, "Considering the smartphone learner: an investigation into student interest in the use of personal technology to enhance their learning," Student Engagement and Experience Journal,, vol. 1, no. 1, pp. 1 - 15, 2012.

[7]. M. Kumar, "Impact of the evolution of smartphones in education technology and its application in technical and professional studies: Indian perspective," International Journal of Managing, vol. 3, no. 3, pp. 39 - 49, 2011.

[8]. M. N. ,. I. A. Boateng Richard, "Smartphone Addictions: A Review of Themes, Theories and Future Research," January 2020.

[9]. U. Bronfenbrenner, "The ecology of human development: Experiments," in Harvard University Press , 1979.

[10]. N. Darko-Adjei, "THE USE AND EFFECT OF SMARTPHONES IN STUDENTS' LEARNING ACTIVITIES:EVIDENCE FROM THE UNIVERSITY OF GHANA, LEGON.," Library Philosophy and Practice (e- journal), 2019.

[11]. R. Bennett, SMARTPHONE USAGE AND ACADEMIC PERFORMANCE, Milligan College, 2020.

[12]. J. Mazer, "Validity of the student interest and engagement scales," Communication Studies , vol. 64, pp. 125-140, 2013.

[13]. C. J. O. R. E. J. L. M. Aldenese, "Relationship of Sociality in Multiplayer Online Games and Academic Interest among Senior High School Students of St. Mary's College of Bansalan, Inc," International Journal of Scientific Research and Engineering Development, vol. 4, no. 3, May-June 2021.

[14]. P. A. Alexander, "Mapping the multidimensional nature of domain learning: The interplay of cognitive, motivational, and strategic forces," vol. 10, pp. 213-250, 1997.

[15]. J. Dudovskiy, "Convenience Sampling Business Researxg methodology," 2011.