

EXAMINING THE RELATIONSHIP OF USING LEARNER- GENERATED DIGITAL MEDIA AND THE BEHAVIORAL INTENTION TO USE MOBILE LEARNING AMONG COLLEGE STUDENTS IN PANABO CITY

Dorren Mae Bermudez

Student, Bachelor of Science in Information System, Davao Del Norte State College, Philippines
bermudez.dorrenmae@dnsc.edu.ph

Fairylyn Jean O. Jaictin

Student, Bachelor of Science in Information System, Davao Del Norte State College, Philippines
jaictin.fairylynjean@dnsc.edu.ph

Kristine Jane P. Lauglaug

Student, Bachelor of Science in Information System, Davao Del Norte State College, Philippines
lauglaug.kristinejane@dnsc.edu.ph

Karen Joy Milagrosa

Student, Bachelor of Science in Information System, Davao Del Norte State College, Philippines
milagrosa.karenjoy@dnsc.edu.ph

Bleezy Maureen A. Piedad

Student, Bachelor of Science in Information System, Davao Del Norte State College, Philippines
piedad.bleezymaureen@dnsc.edu.ph

Glendell R. Jadraque

Faculty, Institute of Computing, Davao Del Norte State College, Philippines
glendell.jadraque@dnsc.edu.ph

ABSTRACT

This study Examines the Relationship of Learner- Generated Digital Media and Behavioral Intention to use Mobile Learning Among College Students in Panabo City. The primary objective of this study is to determine the significant difference in the level of Behavioral Intention to use Mobile Learning when grouped according to Gender, Age Group, and Program. The researchers used the quota sampling technique to select 120 respondents. Since Panabo City has many Colleges Schools, the researchers choose four institutions: Davao del Norte State College, Northlink Technological College, University of Mindanao, and ACES Polytechnic College.

The study collects data through surveys, and the instruments used in the study were the adopted questionnaires on Using Digital Media from the study of [3] and Behavioral Intention to use Mobile Learning from the study of [16]. The items were modified to fit into the study, the indicators were validated and examined by the research adviser before it was laid on to the study in answering the questionnaire, and the respondents will evaluate their answers based on the 5-point Likert Scale. The mean of indicators will be interpreted based on the range of means, descriptive rating, and interpretation. It also found that there is a significant relationship between the level of Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning when grouped according to Gender, Age Group, and Program has an effect on college students of Panabo City.

Keywords: Correlational Research, Learner- Generated Digital Media, Behavioral Intention, Mobile Learning, Panabo City

INTRODUCTION

1.1 Background of the Study

In higher education, learner-generated digital media (LGDM) has become commonplace. The pedagogical approach behind LGDM use is the promotion of student reflection, engagement in active learning, fostering collaboration and creativity, and creating an environment for deep learning [1]. Learner-created content can enhance the practical experience and peer-driven learning [2]. Graduate traits such as interpersonal communication skills, project planning and time management abilities, critical thinking, report writing, research skills, and digital literacy are among the other advantages of LGDM [3].

A quick extension of data and communication innovation (ICT) has presented some imaginative applications within the instruction division. E-learning is an application that is broadly utilized within the instructive segment these days [4]. The e-learning application permits understudies to carry on their scholarly exercises and to get to the necessary data at any time from any put without any limitation [5]. Aside from the economy, one of the loathsome hits of Covid-19 is the instruction sector. Subsequently, conventional learning modes have been changing. The E-learning framework can support understudies and institutions to construct unmistakable openings beneath the widespread situation [6].

How instructors teach in the classroom has been continuously changing and evolving due to technological advancements. Millennials and digital natives are today's students who seem to incorporate technology into every area of their lives. Despite this, they are digital immigrants who have varying degrees of technical proficiency. Millennials do not adapt as quickly as the researchers think to the introduction of new technology in the classroom. As a result, the process of embracing these tools has a direct impact on their behavioral intention and the success of the learning process [7].

The Learning Management System (LMS) software, which is believed to be the most extensively used educational technology tool in higher education, is one such disruptive instrument [8]. Moodle, Blackboard, and Google Classroom are examples of LMSs. Among these instances, Google Classroom has recently grown in popularity, importance, and adoption rate in higher education [9]. It is a free web-based learning management platform that lets anyone with a Google account create and manage classes online. Gmail, Google Drive, Google Docs, Google Calendar, and Google Hangout are all part of the G Suite for Education, which hosts and permits concurrent use of its other web-based tools for collaborative learning across devices, mostly mobile. This makes it extremely convenient and suitable for mobile learning.

1.2 Theoretical Framework

This study was anchored on the theory introduced by Learner-Generated Digital Media (LGDM). The literature reports LGDM to be beneficial for student learning and developing skills such as teamwork and time management. The students will gain knowledge by developing storyboards, representing the content using multimodality (audio, images, text, and video), and reinforcing their learning with the digital media production stage [10].

Many forms of media have been offered just to gain knowledge in performing distance learning. Through Learner-Generated Digital Media, there is a part that needs a further examination that is related to behavioral intention in using mobile learning. The Millennial generation has grown up with digital devices. So Mobile learning is tailored to the way millennials work and think where it is a tool with considerable potential that provides new possibilities for education and learning assessment [11].

Henceforward, with the unprecedented use of mobile devices, without a doubt, mobile learning is and will potentially be game-changing in shaping teaching and learning in the future. For that reason, mobile learning can be defined as a behavioral change in learning that occurs from the attainment of information, attitude, and skills through the use of mobile technologies [12].

1.3 Conceptual Framework

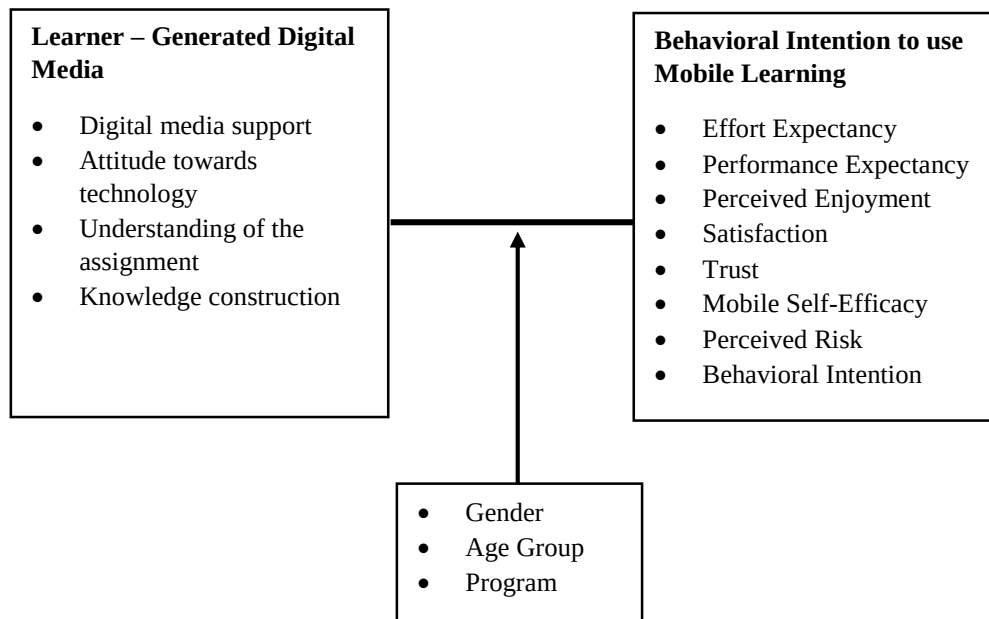


Figure 1: Conceptual Framework of the study

Figure 1 illustrates the conceptual framework used in this study. This diagram shows the relationship between Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning among Panabo City college students. The standard graph depicts the procedure for answering these research questions. The left side represents the independent variable, with indicators such as Digital Media Support, Attitude Towards Technology, Understanding of the Assignment, and Knowledge Construction, whereas the right side represents the dependent variable, with indicators such as Effort Expectancy, Performance Expectancy, Perceived Enjoyment, Satisfaction, Trust, Mobile Self – Efficacy, Perceived Risk, and Behavioral Intention. Gender, Age Group, and Program will also be moderating variables in this study.

1.4 Research Questions

The following are the primary research questions that guided this study:

1. RQ1. What is the demographic profile of the participants of the study in terms of:
 - 1.1 Gender
 - 1.2 Age Group
 - 1.3 Program
2. RQ2. What is the level of Learner – Generated Digital Media in terms of:
 - 2.1 Digital Media Support;
 - 2.2 Attitude towards technology;
 - 2.3 Understanding of the assignment; and
 - 2.4 Knowledge construction.
3. RQ3. What is the level of the Behavioral Intention to use Mobile Learning among College Students in Panabo City in terms of:
 - 3.1 Effort Expectancy;
 - 3.2 Performance Expectancy;
 - 3.3 Perceived Enjoyment;
 - 3.4 Satisfaction;

- 3.5 Trust;
 - 3.6 Mobile Self-Efficacy;
 - 3.7 Perceived Risk; and
 - 3.8 Behavioral Intention.
4. RQ4. Is there a significant difference in the level of Learner-Generated Digital Media when grouped according to:
- 4.1 Gender
 - 4.2 Age Group
 - 4.3 Program
5. RQ5. Is there a significant difference in the level of Behavioral Intention to use Mobile Learning when grouped according to:
- 5.1 Gender
 - 5.2 Age Group
 - 5.3 Program
6. RQ6. Is there a significant relationship between the level of Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning?

1.5 Null Hypothesis

1. Ho1: There is no significant difference in the level of Learner-Generated Digital Media when grouped according to:
 - a. Gender
 - b. Age Group
 - c. Program
2. Ho2: There is no significant difference in the level of Behavioral Intention to use Mobile Learning when grouped according to:
 - a. Gender
 - b. Age Group
 - c. Program
3. Ho3: There is no significant relationship between the level of Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning.

METHODOLOGY

The purpose of this study is to determine if there is a relationship between Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning among College Students in Panabo City. This chapter is organized into the following sections: research design, research locale, participants of the study, sampling techniques, statistical techniques, data collection procedure, research instrument, and ethical considerations.

2.1 Research Design

The researchers employed a quantitative non-experimental correlational research design to address the research questions. The study collects data on the relationship between Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning through surveys.

Correlational research is a type of descriptive research. Because correlational designs are so common in educational research, they are handled differently from descriptive research and are used to properly evaluate relationships between two or more variables. These methods range from the simple relationship between the two variables to the complex interrelationships between several variables. The additional

benefit of correlational research is that it allows for the exploration of multiple relationships in the same study [13].

This approach was performed to study Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning. This concept is a flexible approach that can be applied to a wide variety of fundamental and applied research questions. The relationships determined by this design provide some pointers about the cause-effect relationship rather than making precise judgments about it [14].

This design was chosen to see if there is a relationship between Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning among Panabo City College Students.

2.2 Research Locale

The study was performed within Panabo City, Davao Del Norte, since the chosen respondents were College Students from Panabo City. During this pandemic season, the researchers employ an online survey questionnaire. The research was conducted during the second semester of the academic year 2021-2022.

2.3 Participants of the Study

The study took place in Panabo City, Davao del Norte, between May 2022 and June 2021, with 120 college students from different schools and year levels participating. This study refers to all members of a particular group. The participants selected are college students from Davao del Norte State College, ACES Polytechnic College, University of Mindanao Panabo, and students from Northlink Technological College.

Upon selecting the samples, the following inclusion criteria will be used by the researchers:

1. The respondent must be a college student from Panabo City, regardless of the institution they attend.
2. In terms of ethical considerations, the respondent must be willing to engage in this study.

2.4 Sampling Techniques

Quota Sampling is a non-probabilistic sampling technique in which the population sample has the same proportions between individuals as the entire population for the targeted trait or phenomenon [15]. The researchers used the quota sampling technique to select 120 respondents. Since Panabo City has many Colleges Schools, the researchers choose four among those institutions, namely, Davao del Norte State College, Northlink Technological College, University of Mindanao, and ACES Polytechnic College.

The researchers used this sampling technique to achieve 30 respondents as a quota in each chosen institution. This sampling technique assists the researchers in effectively representing a population.

2.5 Statistical Treatments

The researchers collected, tallied, tabulated, and subjected the responses from a survey questionnaire of the respondents to statistical analysis. The researchers asked assistance from the statistician to analyze and interpret the results utilizing the appropriate statistical tools.

The statistical tools to be utilized in the study are the following:

1. Frequency and Percentage - Used to determine the central tendency of the demographic profile of the respondent as provided in sub-problem 1.
2. Mean - Used to gauge the levels of Learner – Generated Digital Media and Behavioral Intention to use Mobile Learning of college students as provided in sub-problems 2 and 3.
3. T-test - Statistical tools that help in the analysis of two populations. This will be used to determine the significant difference between the level of Learner- Generated Digital Media and the Behavioral

Intention to use Mobile Learning if grouped according to the demographic profile as provided in sub-problems 4 and 5.

4. ANOVA - Used to find out if there is a significant difference between the means of two or more groups. This tool will be used to measure the significant differences in the levels of Learner-Generated Digital Media and the Behavioral Intention to use Mobile Learning if grouped according to the demographic profile as provided in the sub-questions 4 and 5.
5. Pearson r - Used to determine the relationship between two quantitative variables and the degree to which the two variables relate to one another. This tool will be used to measure the significant correlation between the level of Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning as provided in sub-problem 6.

2.6 Data Collection Procedure

The researchers of this current study will undergo the following steps in conducting the study about Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning among Panabo City College Students.

1. The respondents (college students) will be given a letter of consent requesting their permission to perform the study.
2. The researchers will start administering the questionnaire to the respondents using the Google Forms system once permission is granted. The students' responses were given enough time to answer the questions.
3. The data will be gathered. After data gathering, the researchers now collected it for applying the scores and applying the statistical treatment to be used in the study.

2.7 Research Instrument

The instruments used in the study were the adopted questionnaires on Using Digital Media from the study of [3] and Behavioral Intention to use Mobile Learning from the study of [16]. The items were modified to fit into the study, and the indicators were validated and examined by the research adviser before it was laid on to the study.

In answering the questionnaire, the respondents will evaluate their answers based on the 5-point Likert Scale. The mean of indicators will be interpreted based on the range of means, descriptive rating, and interpretation.

Table 1. Scale for Learner- Generated Digital Media

Scale	Range of Mean	Descriptive Rating	Descriptive Interpretation
1	4.20 – 5.00	Very High	The items related to Learner- Generated Digital Media are always manifested.
2	3.40 – 4.19	High	The items related to Learner- Generated Digital Media are oftentimes manifested.
3	2.60 – 3.39	Moderate	The items related to Learner- Generated Digital Media are sometimes manifested.
4	1.80 – 2.59	Low	The items related to Learner- Generated Digital Media are seldom manifested.
5	1.00 – 1.79	Very Low	The items related to Learner- Generated Digital Media are not manifested at all.

Table 1 shows the scales for Learner-Generated Digital media. It also consists of the range of mean, descriptive rating, and descriptive interpretation.

Table 2. Scale for Behavioral Intention to use Mobile Learning

Scale	Range of Mean	Descriptive Rating	Descriptive Interpretation
1	4.20 – 5.00	Very High	The items related to Behavioral Intention to use Mobile Learning are always manifested.
2	3.40 – 4.19	High	The items related to Behavioral Intention to use Mobile Learning are oftentimes manifested.
3	2.60 – 3.39	Moderate	The items related to Behavioral Intention to use Mobile Learning are sometimes manifested.
4	1.80 – 2.59	Low	The items related to Behavioral Intention to use Mobile Learning are seldom manifested.
5	1.00 – 1.79	Very Low	The items related to Behavioral Intention to use Mobile Learning are not manifested at all.

Table 2 shows the scales for Behavioral Intention to use Mobile Learning. It also consists of the range of mean, descriptive rating, and descriptive interpretation.

2.8 Ethical Considerations

Ethical considerations are important since all respondents have moral and legal rights. For this study, the researchers ensured the protection of individuals with the aid of informed consent with their permission to be voluntary respondents. The researchers ensured it did not violate privacy, did not harm feelings, and all the information received was recognized and accurately represented. Moreover, due to the global pandemic, the researchers will utilize the online platforms (Google Form) for the safety and welfare of the respondents. But, before the researchers gather the needed data, first, explain the goal and the purpose of this study. The cooperation, volunteerism, and honesty of the respondents of this study were highly appreciated.

In terms of the avoidance of plagiarism, the researchers used the turn-it-in software to ensure that no trace/evidence of misrepresentation of someone else's work as their own. Lastly, the researchers will ensure anonymity and confidentiality by hiding the identity of the respondents.

RESULTS AND DISCUSSIONS

The study outcome is discussed in this chapter. All of the participants in this survey are students in Panabo City. The presentation of data in this research study is arranged in the following sequence: The demographic profile of the participants of the study in terms of Gender, Age Group, and Program, the Level of Learner – Generated Digital Media in terms of Digital Media Support, Attitude towards Technology, Understanding of the Assignment, and Knowledge Construction. Additionally, the level of the Behavioral Intention to use Mobile Learning in terms of Effort Expectancy, Performance Expectancy, Perceived Enjoyment, Satisfaction, Trust, Mobile Self – Efficacy, Perceived Risk, and Behavioral Intention, a significant difference in the level of Learner-Generated Digital Media when grouped according to Gender, Age Group, and Program, a significant difference in the level of Behavioral Intention to use Mobile Learning when grouped according to Gender, Age Group, and Program, and a significant relationship between the level of Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning.

RQ1. What is the demographic profile of the participants of the study in terms of Gender, Age Group, and Program?

Table 3. Demographic Profile of the Participants

Demographic Characteristics		Frequency	Percentage
Gender	Female	93	77.5
	Male	27	22.5
Age Group	18-25 years old	115	95.8
	26-30 years old	5	4.2
Program	BSED	13	10.8
	BACOM	5	4.2
	BAELM-Applied Linguistic	1	0.8
	BFAS	1	0.8
	BPA	5	4.2
	BSE	2	2.5
	BSFT	5	4.2
	BSIS	27	22.5
	BSIT	9	7.5
	BSMB	1	0.8
	BSSW	4	3.3
	BSTM	5	4.2
	BSTLE	3	2.5
	BSA	3	2.5
	BSC	10	8.3
	BSHM	12	10.0
	BSIT w/ Robotics	1	0.8
	BSBA FM	9	7.5
	BSBA HR	1	0.8
	DHRT	1	0.8

As shown in Table 3, there is a total of 120 participants in the study composed of 77.5% female and 22.5% male. There were 95.8% of 18-25 years old and 4.2% of 26-30 years old. 10.8% of the respondents came

from Bachelor in Secondary Education, 4.2% of the respondents came from Bachelor of Arts in Communication, 0.8% of the respondents came from Bachelor of Arts in English Language Major in Applied Linguistic, 0.8% of the respondents came from Bachelor of Fisheries and Aquatic Science, 4.2% came from Bachelor of Public Administration, 2.5% of the respondents came from Bachelor of Entrepreneurship, 4.2% of the respondents came from Bachelor of Food Technology, 22.5% of the respondents came from Bachelor of Science in Information System, 7.5% of the respondents came from Bachelor of Science in Information Technology, 0.8% of the respondents came from Bachelor of Science in Marine Biology, 3.3% of the respondents came from Bachelor of Science in Social Work, 4.2% of the respondents came from Bachelor of Science in Tourism Management, 2.5% of the respondents came from Bachelor of Technology and Livelihood Education, 2.5% of the respondents came from BS Accountancy, 8.3% of the respondents came from BS Criminology, 10% of the respondents came from BS Hospitality & Management, 0.8% of the respondents came from BS Information Technology with Robotics, 7.5% of the respondents came from BSBA FM, 1.7% of the respondents came from BSBA HR, 0.8% of the respondents came from Diploma Hotel and Restaurant Technology.

RQ2. What is the level of Learner – Generated Digital Media in terms of digital media support, attitude towards technology, understanding of the assignment, and knowledge construction.

Table 4. Level of Learner- Generated Digital Media in Terms of Digital Media Support

	N	Mean	Std. Deviation
Digital media support	120	4.0083	.59206
Valid N (listwise)	120		

Presented in Table 4 is the level of learner- generated digital media in terms of digital media support. It contains the mean and standard deviation of the said indicator. The mean of the level of learner- generated digital media in terms of digital media support is 4.01 with a standard deviation of 0.59. This shows that the level of learner- generated digital media in terms of digital media support is high. The items related to Learner- Generated Digital Media are oftentimes manifested.

Table 5. Level of Learner- Generated Digital Media in Terms of Attitude Towards Technology

	N	Mean	Std. Deviation
Attitude towards technology	120	4.2792	.59100
Valid N (listwise)	120		

Table 5 shows the level of learner- generated digital media in terms of attitude towards technology. The mean of the level of learner- generated digital media in terms of attitude toward technology is 4.30 with a standard deviation of 0.59. This shows that the level of learner- generated digital media in terms of attitude towards technology is high. The items related to Learner- Generated Digital Media are always manifested.

Table 6. Level of Learner- Generated Digital Media in Terms of Understanding the Assignment

	N	Mean	Std. Deviation
Understanding the assignment	120	4.1313	.50519
Valid N (listwise)	120		

Presented in Table 6 is the level of learner- generated digital media in terms of understanding the assignment. The mean of the level of learner- generated digital media in terms of understanding the assignment is 4.13 with a standard deviation of 0.51. This shows the level of learner- generated digital media in terms of understanding the assignment. The items related to Learner- Generated Digital Media are oftentimes manifested.

Table 7. Level of Learner- Generated Digital Media in Terms of Knowledge construction

	N	Mean	Std. Deviation
Knowledge construction	120	4.1729	.39260
Valid N (listwise)	120		

Table 7 shows the level of learner- generated digital media in terms of knowledge construction. The mean of the level of learner- generated digital media in terms of knowledge construction is 4.17 with a standard deviation of 0.39. This shows the level of learner- generated digital media in terms of knowledge construction. The items related to Learner- Generated Digital Media are oftentimes manifested.

RQ3. What is the level of the Behavioral Intention to use Mobile Learning among College Students in Panabo City in terms of effort expectancy, performance expectancy, perceived enjoyment, satisfaction, trust, mobile self-efficacy, perceived risk, and behavioral intention?

Table 8. Level of Behavioral Intention to Use Mobile Learning

Indicators	N	Mean	Standard Deviation
BI_ Effort Expectancy	120	4.1067	.68841
BI_ Performance Expectancy	120	4.0458	.40458
BI_ Perceived Enjoyment	120	4.0028	.67293
BI_ Satisfaction	120	3.7600	.68580
BI_ Trust	120	3.7550	.67883
BI_ Mobile Self-Efficacy	120	3.9278	.63095
BI_ Perceived Risk	120	3.6639	.74032

Table 8 shows the level of behavioral intention to use mobile learning, which is divided into eight indicators. The first indicator is Effort Expectancy. The mean level of the effort expectancy to use mobile learning of the respondents is 4.11, with a standard deviation of 0.69. This shows that the effort expectancy to use mobile learning is high. It is a determinant of personal intention about using new technology in the context of this study. It is associated with teachers' expectation of ease of use of mobile internet, in their teaching [17].

The second indicator talks about Performance Expectancy. The mean level of performance expectancy to use mobile learning of the respondents is 4.05, with a standard deviation of 0.65. It depicts that the performance expectancy to use mobile learning of the respondents is high. Performance expectancy refers to the degree to which an individual perceives that using a system will help him or her to attain a gain in job performance [18].

Moreover, the third indicator is the Perceived Enjoyment of using mobile learning, the mean level of perceived enjoyment of the respondents is 4.00, with a standard deviation of 0.67. This shows that the perceived enjoyment of using mobile learning among the respondents is high. Perceived enjoyment is a significant determinant of the behavioral intention to use mobile learning and mobile services. It is necessary to make learning activities more enjoyable to promote learners' acceptance and use of mobile learning due to a possible sense of pressure during the process of learning [19].

The fourth indicator is the Satisfaction to use mobile learning, the mean level of satisfaction of respondents is 3.76, with a standard deviation of 0.69. It means that the satisfaction to use mobile learning among the respondents is high. There is a growing body of literature showing that satisfaction has a positive relationship with student engagement and academic performance. The quality of learning is based on faculty and student satisfaction along with learning effectiveness, access, and institutional cost-effectiveness [20].

In addition, the fifth indicator is the Trust to use mobile learning, the mean level of trust of the respondents is 3.76, with a standard deviation of 0.68. It means that the trust into use of mobile learning among the respondents is high. Trust in technology is described as the users' reliance on a tool, machine, technique, artifact, craft, system, or method as a whole. It is the relationship developed between the user and the system or the technology itself which involved a decision to build cooperation with each other or not [21].

The sixth indicator is the Mobile Self-Efficacy to use mobile learning, the mean level of mobile self-efficacy of the respondents is 3.93, with a standard deviation of 0.63. This shows that the self-efficacy to use mobile learning of the respondents is high. Self-efficacy services of mobile learning can more significantly enhance students' willingness to continue using mobile learning [22].

The seventh indicator talks about the Perceived Risk to use mobile learning, the mean level of the perceived risk of the respondents is 3.66 with a standard deviation of 0.74. It depicts that the perceived risk to use mobile learning of the respondents is high. This study was investigating the perceived risk of the Internet and mobile devices, and risk factors in the process of m-learning had to be measured. Users often worry about risks such as privacy problems, system errors, losing passwords, incompatibility of mobile operating systems and security software, and low system quality [16].

Meanwhile, for the indicator, Behavioral Intention to use mobile learning, the mean level of the behavioral intention of the respondents is 3.98, with a standard deviation of 0.67. It means that the behavioral intention to use mobile learning of the respondents is high. Behavior intention is an individual subject's probability of performing a behavior. As part of the behavioral intention is also defined as a user group willing to use information technologies for their tasks [23].

RQ4. Is there a significant difference in the level of Learner-Generated Digital Media when grouped according to gender, age group, and program?

Table 9 shows the significant difference in the level of Learner-Generated Digital Media when it is grouped according to gender, age group, and program. The tool that was used to analyze the significant difference is ANOVA (Analysis of Variance).

Table 9. ANOVA Distribution of Respondents Significant Difference in The Level of Learner- Generated Digital Media to Gender, Age Group, and Program. ANOVA (Between Groups)

	Sum of Squares	DF	Mean of Squares	F	Sig
LGDM Mean Gender	0.719	118	0.473	5.901	.017
LGDM Mean Age Group	0.951	118	0.343	1.045	.309
LGDM Mean Program	17.490	119	0.240	1.242	.240

The interpretation of the learning generated by digital media according to gender is that there is no sufficient evidence to say that there is a statistically significant difference between groups. Furthermore, this study found that Learner– Generated Digital Media had a lower level (4.21 ± 0.41) for female respondents compared to male respondents (4.21 ± 0.41) $t(188) = 0.719$, $p = 0.473$.

While the interpretation of the learning generated by digital media according to the age group is that there is no sufficient evidence to say that there is a statistically significant difference between groups. Furthermore, this study found that Learner – Generated Digital Media had a lower level (4.03 ± 0.22) for 26-30 years old respondents compared to 18-25 years old (4.21 ± 0.41) $t(188) = 0.951$, $p = 0.343$.

Learning generated digital media according to the program shows that there is no sufficient evidence to say that there is a statistically significant difference between groups was determined by one-way ANOVA ($F(19,100) = 1.242$, $p = 0.240$).

RQ5. Is there a significant difference in the level of Behavioral Intention to use Mobile Learning when grouped according to gender, age group, and program?

Table 10 shows the difference in the level of Behavioral Intention to use Mobile Learning when grouped according to Gender, The Gender is divided into two indicators. The first indicator is Behavioral Intention to use Mobile Female the mean level is 3.9360 with a standard deviation of. 53644, Second Learning Male the mean level is 3.8012 with the standard deviation of. 39990. The Interpretation is that there is no sufficient evidence to say that there is a statistically significant difference between groups. Furthermore, this study found that Behavioral Intention to use Mobile Learning had a lower level (3.80 ± 0.40) for Male respondents compared to female respondents (3.94 ± 0.54) $t(188) = 1.211$, $p = 0.228$.

Table 10. Mean and Standard Deviation of Respondents when Grouped According to Gender

	Gender	N	Mean	Std. Deviation
Behavioral Intention to Use Mobile Learning	Female	93	3.9360	.53644
	Male	27	3.8012	.39990

Table 11 shows the difference in the level of Behavioral Intention to use Mobile Learning when grouped according to Age Group, The Age group is divided into two indicators. The First indicator is the Behavioral Intention to use Mobile Age 18-25 years old the mean level is 3.9161 with the standard deviation of. 51415, Second Learning Age 26-30 years old the mean level is 3.6654 with the standard deviation of. 37971. The Interpretation: There is no sufficient evidence to say that there is a statistically significant difference between groups. Furthermore, this study found that Behavioral Intention to use Mobile Learning had a lower level (3.67 ± 0.38) for 26-30 years old respondents compared to 18-25 years old respondents (3.92 ± 0.51) $t(188) = 1.076$, $p = 0.284$.

Table 11. Mean and Standard Deviation of Respondents when Grouped According to Gender

	Age Group	N	Mean	Std. Deviation
Behavioral Intention to Use Mobile Learning	18-25 years old	115	3.9161	.51415
	26-30 years old	5	3.6654	.37971

Table 12 shows a difference in the level of Behavioral Intention to use Mobile Learning when grouped according to the level of the Program is divided into Twenty indicators. The first indicator is Bachelor in Secondary Education the mean level is 3.9806 with the standard deviation 0.51928, Second indicator is Bachelor of Arts in Communication the mean level is 4.2000 with the standard division 0.50912, Third

Bachelor of Arts in English Language Major in Applied Linguistic the mean level is 3.7479 with 0 standard division, Fourth Bachelor of Fisheries and Aquatic Science the mean level is 4.3563 with 0 standard division, Fifth Bachelor of Public Administration the mean level is 3.6429 with the standard deviation of 0.35031, Sixth Bachelor of Science in Entrepreneurship the mean level is 3.8271 with the standard deviation of 0.55995, Seventh Bachelor of Science in Food Technology the mean level is 3.9779 with the standard deviation of 0.54462, Eight Bachelor of Science in Information Systems the mean level is 3.8672 with the standard deviation of 0.55325, Ninth Bachelor of Science in Information Technology the mean level is 3.8488 with the standard deviation of 3.8488, Tenth Bachelor of Science in Marine Biology the mean level is 3.8333 with 0 standard deviation, Eleventh Bachelor of Science in Social Work the mean level is 4.1146 with the standard deviation of 0.57108, Twelve Bachelor of Science in Tourism Management the mean level is 3.8225 with the standard deviation of 0.53749, Thirteen Bachelor of Technology and Livelihood Education the mean level is 3.5410 with the standard deviation of 0.46979, Fourteen BS Accountancy the mean level is 4.1111 with the standard deviation of 0.39523, Fifteen BS Criminology the mean level is 3.6565 with the standard deviation of 0.46448, Sixteen BS Hospitality & Management the mean level is 3.9861 with the standard deviation of 0.33709, Seventeen Information BS Information Technology with Robotics the mean level is 3.5646 with 0 standard deviation, Eighteen BSBA FM the mean value is 3.8516 with the standard deviation of. 70678, Nineteen BSBA HR the mean level is 5.0000 with the standard deviation of. 00000, Twenty Diploma hotel and restaurant technology the mean level is 4.2000 with 0 standard deviations. The mean total is 3.9057 with a standard deviation of 0.51051.

Table 12. Mean and Standard Deviation of Respondents When Grouped According to Program

	Mean	Std. Deviation
BSED	3.9806	3.9806
BACOM	4.2000	4.2000
BAELM-Applied Linguistic	3.7479	
BFAS	4.3563	
BPA	3.6429	.35031
BSE	3.8271	.55995
BSFT	3.9779	.54462
BSIS	3.8672	.55325
BSIT	3.8488	.37853
BSMB	3.8333	
BSSW	4.1146	.57108
BSTM	3.8225	.53749
BSTLE	3.5410	.46979
BSA	4.1111	.39523
BSC	3.6565	.46448
BSHM	3.9861	.33709

BSIT w/ Robotics	3.5646	
BSBA FM	3.8516	.70678
BSBA HR	5.0000	.00000
DHRT	4.2000	
Total	3.9057	.51051

Table 13 shows the significant difference in Behavioral Intention to use Mobile when grouped according to Gender, Age Group, and Program. The tool that was used to analyze the significant difference is ANOVA (Analysis of Variance).

Table 13. ANOVA Distribution of Respondents' Significant Difference in the Behavioral Intention to use Mobile to Gender, Age Group, and Program ANOVA (Between Group)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.256	19	.277	1.074	.389
Within Groups	25.757	100	.258		
Total	31.013	119			

Interpretation: There is no sufficient evidence to say that there is a statistically significant difference between groups as determined by one-way ANOVA ($F(19,100) = 1.074, p = 0.389$).

RQ6. Is there a significant relationship between the level of Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning?

Table 14. Relationship Between the Level of Learner-Generated Digital Media and Behavioral Intention to Use Mobile Learning

		Learner-Generated Digital Media	Behavioral Intention to Use Mobile Learning
	Pearson Correlation	1	.575 ^{**}
Learner-Generated Digital Media	Sig. (2-tailed)		.000
	N	120	120
	Pearson Correlation	.575 ^{**}	1
Behavioral Intention to Use Mobile Learning	Sig. (2-tailed)	.000	
	N	120	120

In Table 14, the Pearson product-moment correlation was used to determine the relationship between the level of Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning. The result shows a weak negative correlation with an r-value of 0.675, which means a moderate, positive correlation

between the level of Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning. Since the p-value is $0.0001 < 0.01$, then we reject the null hypothesis. Therefore, there is a significant relationship between the level of Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning.

CONCLUSIONS AND RECOMMENDATIONS

After the conduct of data gathering, interpretation, and presentation, here are now the conclusion and recommendations of this present research study.

4.1 Conclusions

The study sought to investigate the significant relationship between the level of Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning Among College students in Panabo City. This study hypothesized as follows:

Research question number 1 is about the demographic profile of the participants of the study in terms of Gender, Age, Group, and Program. There was a total of 120 participants: 77.5% female and 22.5% male. The highest percentage of respondents belong to 18-25 years old, and most of the participants are 26-30 years old. Research question number 2 is about the level of Learner-Generated Digital Media in terms of digital media support, attitude towards technology, understanding of the assignment, and knowledge construction. The level of Learner-Generated Digital Media in terms of; Digital media support mean is 4.01 with a standard deviation of 0.59, Attitude towards technology mean 4.30 with a standard deviation of 0.59, Understanding of the assignment mean of 4.13 with a standard deviation of 0.51, and knowledge construction mean 4.17 with standard deviation of 0.39 are high. Furthermore, research question number 3, is about the level of Behavioral Intention to use Mobile Learning Among College Students in Panabo City in terms of effort expectancy, performance expectancy, perceived enjoyment, Satisfaction, trust, mobile self-efficacy, perceived risk, and behavioral intention. 4.11 is the mean of Effort Expectancy with a standard deviation of 0.69, the mean of Performance Expectancy is 4.05 with a standard deviation of 0.65, the mean of Perceived Enjoyment is 4.00 with a standard deviation of 0.67, Satisfaction mean is 3.76 with a standard deviation of 0.68, Trust mean is 3.75 with a standard deviation of 0.67, Mobile Self-Efficacy mean is 3.92 with a standard deviation of .63, and Perceived Risk mean is 3.66 with a standard deviation of 0.74. It depicts that these seven expectancies to use Mobile learning are High. Research question number 4 and 5 is about finding the significant difference in the level of Learner-Generated Digital Media in terms of moderating variable (gender, age group, year level, program). The result revealed that the moderating variable affects all of the moderating variables towards the level of Learner-Generated Digital Media and Behavioral Intention to use Mobile Learning Among the College students in Panabo City.

Research question number 6 is about determining the relationship between the Learner-Generated Digital Media and Behavioral Intention. As the result presented, this study proved that there is a significant difference between the two variables. The result shows that the level of Learner-Generated Digital Media and Behavioral Intention among College Students in Panabo City is high.

4.2 Recommendations

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

1. More learning software that is easy to access and utilize by learners and educators may be developed by software developers.
2. Academic leaders may hold seminars (in person or online) to educate students about the generated media that they use in their learning process.

3. Teachers can create interventions that influence students' emotional and cognitive interests to boost their overall academic engagement.
4. More in-depth experimental research into how teachers balance mobile hardware and software, lesson material, teaching methods, and educational aims may be conducted in the future.
5. Future researchers may conduct research that will focus on how Learner Generated Digital Media (LDGM) affects the learning process of students to gain knowledge and perspectives about these problems that can be used by educators in their respective classes.

ACKNOWLEDGEMENT

We, the researchers from Davao del Norte State College, pursuing a Bachelor of Science in Information System, would like to first convey our heartfelt gratitude to our dear Lord for giving us knowledge, wisdom, and determination for the success of this study. We are also very pleased and honored to work with our very own Quantitative Method instructor and research advisers, Professor Glendell R. Jadraque and Professor Mark Van M. Buladaco. We gained a lot from their study approaches, comments, ideas, and encouragement, which we can apply in our future research. We'd like to thank Ma'am Jessa Albit, our statistician, for developing and interpreting all the data we gathered.

And we also want to offer our special thanks to our parents and guardians who gave us their support, especially in terms of finances and emotional guidance. Without the help of the people mentioned, this research study won't be possible.

REFERENCES

1. E. Barra, S. A. Herrera, and J. Y. Pastor, "New Review of Hypermedia and Multimedia Using multimedia and peer assessment to promote collaborative e-learning," no. December 2014, pp. 37–41, doi: 10.1080/13614568.2013.857728.
2. J. Pinchot, K. Pullet, S. Hunsinger, and P. Wu, "Information Systems Education Journal," vol. 12, no. 2, 2014.
3. J. Reyna and P. Meier, "education sciences Using the Learner-Generated Digital Media (LGDM) Framework in Tertiary Science Education : A Pilot Study," 2018, doi: 10.3390/educsci8030106.
4. A. K. M. N. Islam, "E-learning system use and its outcomes: Moderating role of perceived compatibility," *Telemat. Informatics*, vol. 33, no. 1, pp. 48–55, 2016, doi: 10.1016/j.tele.2015.06.010.
5. A. Althunibat, "Determining the factors influencing students' intention to use m-learning in Jordan higher education," *Comput. Human Behav.*, vol. 52, pp. 65–71, 2015, doi: 10.1016/j.chb.2015.05.046.
6. T. Wang, C. L. Lin, and Y. S. Su, "Continuance intention of university students and online learning during the covid-19 pandemic: A modified expectation confirmation model perspective," *Sustain.*, vol. 13, no. 8, 2021, doi: 10.3390/su13084586.
7. I. Esteban-Millat, F. J. Martínez-López, M. Pujol-Jover, J. C. Gázquez-Abad, and A. Alegret, "An extension of the technology acceptance model for online learning environments," *Interact. Learn. Environ.*, vol. 26, no. 7, pp. 895–910, 2018, doi: 10.1080/10494820.2017.1421560.
8. L. Abazi-Bexheti, A. Kadriu, M. Apostolova-Trpkovska, E. Jajaga, and H. Abazi-Alili, "LMS Solution: Evidence of Google Classroom Usage in Higher Education," *Bus. Syst. Res.*, vol. 9, no. 1, pp. 31–43, 2018, doi: 10.2478/bsrj-2018-0003.
9. P. Jakkaew and S. Hemrungrote, "The use of UTAUT2 model for understanding student perceptions using Google Classroom: A case study of Introduction to Information Technology course," 2nd Jt. Int. Conf. Digit. Arts, Media Technol. 2017 Digit. Econ. Sustain. Growth, ICDAMT 2017, pp. 205–209, 2017, doi: 10.1109/ICDAMT.2017.7904962.

10. J. Reyna, J. Hanham, and P. Meier, "A taxonomy of digital media types for Learner-Generated Digital Media assignments," *E-Learning Digit. Media*, vol. 14, no. 6, pp. 309–322, 2017, doi: 10.1177/2042753017752973.
11. S. A. Nikou and A. A. Economides, "Mobile-based assessment: Investigating the factors that influence behavioral intention to use," *Comput. Educ.*, vol. 109, pp. 56–73, 2017, doi: 10.1016/j.compedu.2017.02.005.
12. J. A. Kumar, B. Bervell, N. Annamalai, and S. Osman, "Behavioral intention to use mobile learning: Evaluating the role of self-efficacy, subjective norm, and whatsapp use habit," *IEEE Access*, vol. 8, pp. 208058–208074, 2020, doi: 10.1109/ACCESS.2020.3037925.
13. P. L. Busk, "Correlational Studies," *Wiley StatsRef Stat. Ref. Online*, pp. 1–2, 2015, doi: 10.1002/9781118445112.stat06473.pub2.
14. F. M. Cigerci, "INVESTIGATION OF THE RELATIONSHIP BETWEEN PROSPECTIVE TEACHERS ' ATTITUDES TOWARDS MOBILE LEARNING AND THEIR READINESS FOR MOBILE LEARNING INVESTIGATION OF THE RELATIONSHIP BET", no. September 2021, 2022.
15. Q. Survival et al., *QOL Measurement, QOL Definition* ►. 2014.
16. C. M. Chao, "Factors determining the behavioral intention to use mobile learning: An application and extension of the UTAUT model," *Front. Psychol.*, vol. 10, no. JULY, pp. 1–14, 2019, doi: 10.3389/fpsyg.2019.01652.
17. K. Nikolopoulou, V. Gialamas, and K. Lavidas, "Habit, hedonic motivation, performance expectancy and technological pedagogical knowledge affect teachers' intention to use mobile internet," *Comput. Educ. Open*, vol. 2, no. March, p. 100041, 2021, doi: 10.1016/j.caeo.2021.100041.
18. sodiq onaolapo and O. Oyewole, "Performance Expectancy, Effort Expectancy, and Facilitating Conditions as Factors Influencing Smart Phones Use for Mobile Learning by Postgraduate Students of the University of Ibadan, Nigeria," *Interdiscip. J. e-Skills Lifelong Learn.*, vol. 14, no. November, pp. 095–115, 2018, doi: 10.28945/4085.
19. F. Mubuke, "The Predictability of Perceived enjoyment and Its Impact on the intention to use Mobile learning systems," *Asian J. Comput. Sci. Inf. Technol.*, no. March, pp. 1–5, 2017.
20. W. Elshami, M. H. Taha, M. Abuzaid, C. Saravanan, S. Al Kawas, and M. E. Abdalla, "Satisfaction with online learning in the new normal: perspective of students and faculty at medical and health sciences colleges," *Med. Educ. Online*, vol. 26, no. 1, 2021, doi: 10.1080/10872981.2021.1920090.
21. E. N. M. Ibrahim and N. Walid, "Trust Contributing Factors in M-Learning Technology," *Procedia - Soc. Behav. Sci.*, vol. 129, pp. 554–561, 2014, doi: 10.1016/j.sbspro.2014.03.713.
22. J. Yin and J. She, "A Study on Factors Influencing University Students' Willingness to Continue Using Mobile Learning in the Post-Coronavirus Period," *SHS Web Conf.*, vol. 123, p. 01010, 2021, doi: 10.1051/shsconf/202112301010.
23. A. Y. Almatari, N. A. Iahad, and A. S. Balaid, "Factors influencing students ' intention to recycle," *J. Inf. Syst. Res. Innov.*, pp. 1–8, 2013.