

Perception to Educational Games towards Learning Attitudes of College Students in St. Mary’s College of Bansalan Inc

Christen Mea Lascuna¹, Elizza Lane Mainar²,JeharrahGelera³, Joy Belarmino⁴, Shaira Clyde Cabahug⁵, Yasmien Torres⁶, Evelyn Pansoy⁷, Jhon Bryan J. Cantil⁸

1(BS in Information Technology, St. Mary’s College of Bansalan Inc., Email: meapayatot@gmail.com)

2(BS in Information Technology, St. Mary’s College of Bansalan Inc., Email: lanemainar@gmail.com)

3(BS in Information Technology, St. Mary’s College of Bansalan Inc., Email: Gelera@gmail.com)

4(BS in Information Technology, St. Mary’s College of Bansalan Inc., Email: joybelarmino@gmail.com)

5(BS in Information Technology, St. Mary’s College of Bansalan Inc., Email:shairacabahug@gmail.com)

6(BS in Information Technology, St. Mary’s College of Bansalan Inc., Email: yasmentorres@gmail.com)

7(Program Head, Education Program, St. Mary’s College of Bansalan Inc., Email: evep2662@gmail.com)

8(Program Head, BS in Information Technology, St. Mary’s College of Bansalan Inc., Email: jhonbcantil@gmail.com)

Abstract:

Many lauded methods promise to provide a remedy to learning issues, and education is prospering. However, the most efficient manner of conveying knowledge and teaching skills is to approach learning through pleasure. And educational computer game research has exploded due to the widespread notion that games may provide a variety of learning benefits, as well as the fact that games are extremely popular among younger generations.

Games-based learning has piqued the interest of educationalists and businesspeople who want to take use of the qualities of computer games, which are seen as a potentially effective method of teaching and learning by some. Despite this enthusiasm for game-based learning, there is a paucity of scientific evidence to back up the approach's validity in the larger context of education and gaming. Students "are experienced to learn by doing" with the usage of digital games, according to the report. Educational games provide a learning environment that caters to a wide range of learning methods. Have proven that by making digital games easy or pleasant to learn, students' negative attitudes can be transformed. Despite this, many educators are opposed to incorporating digital gaming into the classroom. It was shown that adopting educational games as a learning method can help students learn more across a variety of learning domains, including cognitive, emotional, and psychomotor skills. Students are also more motivated to study and learn.

Keywords —Educational Game, Perception, Motivation

I. INTRODUCTION

Education is thriving with many touted practices promising to allow a solution in learning difficulties. It is mostly based on the proliferation of the digital and communication technologies. But approaching learning through amusement is probably the most effective way of imparting knowledge and teaching

skills [1]. And the educational computer games studies experienced rapid growth due to the belief that games can offer various learning benefits being highly popular among younger generations because it is feel less motivated to learn. It is important to know how educational games can help to enhance the student’s motivation and learning perceptions.

Games-based learning has captured the interest of educationalists and industrialists who seek to exploit the characteristics of computer games as they are perceived by some to be a potentially effective approach for teaching and learning [2]. Despite this interest in using games-based learning there is a dearth of empirical evidence supporting the validity of the approach covering the wider context of gaming and education. Reported that with the use of digital games, students “are experienced to learn by doing”. Furthermore, every learner has a different learning style. But, the traditional education system may not be able to accommodate all the learning styles suited to all learners. Educational games offer learning experience that can meet a variety of learning styles. Have shown that students’ negative can be changed through using digital games by making them easy or fun to learn. Despite all of these many people in the education field are against the idea of involving digital games especially in classroom activities. The simple fact not to allow them to appreciate the potential benefits of the games [3].

It had found that using educational games as a learning approach can enhance student’s learning of various learning domain: namely cognitive, affective as well as psychomotor skills [8] [4]. Students also gain higher motivation to study and they are more motivated to learn, found that EG does help to increase student motivation. Students were found enjoying the games, always engaged, motivated, and excited during the game play session. EG encompass a wide range of activities that can support playing, entertainment and learning, teaching on many disciplines. According to them, game motivates learning, offer immediate feedback, support skills, and influences changes in behavior and attitudes [5].

This research the “Perceptions to Educational Games towards Learning Attitudes of College Students in St. Mary’s College of Bansalan, Inc.” will be able to determine the importance of educational games to the learning interest of the students and help to increase the dissemination of information to the public. Also, to know the

learning attitudes of the students. The researcher of these study make a questionnaire to determine the student’s perception to educational games and there learning attitudes. Also, to determine for the significant relationship that prevails from the two variables in which it is educational games and learning Attitude College student’s on St. Mary’s College of Bansalan, Inc. Through this the student’s has the ability to accomplish to the given task or activities.

Theoretical Framework

The framework for the scoping literature review is supported by two theoretical models: Situated Cognition Theory authored by Brown, M.R [6] and Gagne’s Theory the Gagne’s Theory developed by Robert Gagne [7]. These theories were written to give foundations to the concepts of the perceptions towards educational games and learning attitudes of the students.

Situated Cognition theory, is based on the premise that knowledge is formed and supported by the cultural, social, and physical experiences and situations of an individual [8]. Learning occurs in the everyday life experiences of an individual and the theoretical model emphasizes an authentic context for skill acquisition. Learning is organic, meaningful, and effective when materials are rooted in personal connections and reflect real-life experiences [9]. Students persist academically educational Games and materials are made relevant to the lived experience. Educational game-based learning aligned with many of the suggested parameters outlined by theories of Situated Cognition and Adult Learning promotes effective adult learning. The Educational games experience provides learning within a specific problem-solving context which allows student learners to use their experiences and errors as a gage for learning. Educational game-based learning provides non-traditional learners with more authentic context for skill acquisition [10].

Gagne’s theory stipulates that there are several different types or levels of learning, implying that each types also requires a different

approach to instruction [11]. Good games already do this. Game designers employ multiple approaches to both aid and challenge players. According to Gagne “an instructional plan can generate both appropriate environmental stimuli and instructional interactions, and thereby bringing about change in the cognitive structures and operations of the learner” [12]. Each of Gagne’s five categories are well supported in most good games. Verbal information is provided both verbally and textually, and even games like Pokémon that are targeted at young children, still present information textually. Intellectual skills such as the use of concepts and rules to solve problems are the cornerstone of most strategy games. Cognitive strategies are how we win games by finding novel solutions to problems, the acquisition of skills and knowledge, and practice and perseverance [13].

Conceptual Framework

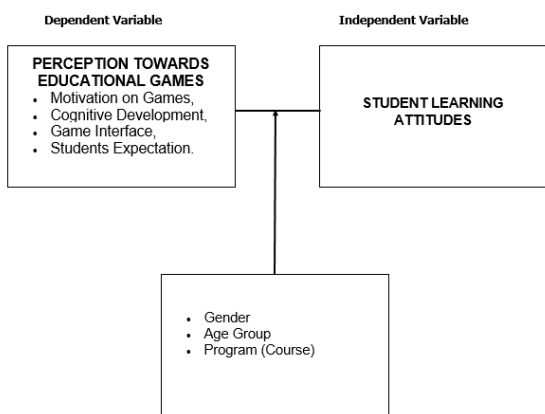


Figure 1. Conceptual Framework of the study

The presented illustration above is the conceptual framework of this current study that shows the independent variable, dependent variable, and the moderating variable with their respective indicators.

The independent variable which the learning attitudes, has no indicators mentioned above in the conceptual Framework [14]. Moving on, the

dependent variable, perceptions towards educational games, has four indicators, Motivation on Games, Cognitive Development, Game Interface, and Student’s Expectation. The Motivation on Games indicator was defined in using the games for their learning and it is noticeable finding from this construct students found using games makes more interesting. Also, it shows that students are highly motivated with the idea of using educational games for their learning and more interesting to do their exercises. Cognitive Development also defined of this factor shows that students found playing educational games is challenging activity as well as help to think critically. Meanwhile, the Game Interface indicator determine the success of educational games with good educational content, but poor usability will have difficulties achieving intended educational results. Student’s Expectation indicator defined that student’s style and preferences have changed, and as the educators must understand preferences of the new generations of learners [15].

The moderating variable is the Demographic Profile of the respondents having three indicators, gender, age group, and program (Course) [16].

Research Questions

This study intends to find out the degree of the relationship of the perception towards educational games and learning attitudes among college students in St. Mary’s College of Bansalan, Inc. Specifically, this study seeks, to answer the following questions:

1. What is the profile of the respondents?
 - a. Gender
 - b. Age Group
 - c. Program (Course)

2. What is the level of perception towards educational games among college students in St. Mary’s College of Bansalan, Inc in terms of:
 - a. Motivation on Games,
 - b. Cognitive Development,
 - c. Game Interface,

d. Students Expectation.

3. What is the level of learning attitudes of among college students in St. Mary's College of Bansalan, Inc?

4. Is there a significant difference on the level of perception towards educational games when grouped according to:

- a. Gender
- b. Age Group
- c. Program (Course)

5. Is there a significant difference on the level of learning attitudes when grouped according to:

- a. Gender
- b. Age Group
- c. Program (Course)

6. Is there a significant relationship between the level of perception towards educational games and learning attitudes among college students in St. Mary's College of Bansalan, Inc?

Null Hypothesis

1. There is no significant difference in the level of educational games in college students.

2. There is no significant difference in the level of learning attitudes in college students.

3. There is no significant relationship between the educational games and learning attitudes of college students in St. Mary's College of Bansalan, Inc.

II. METHODOLOGY

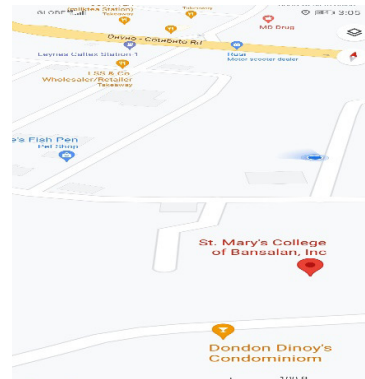
Research Design

The researchers developed a quantitative questionnaire to use as the survey instrument. In this study, the researchers use descriptive correlation research design to describe the perception to educational games and learning attitudes among college students of St. Mary's College of Bansalan, Inc [17]. The descriptive survey research is defined as a research method to do in collecting the data. Also, to examine the relationship between those variable [18]. According

to Creswell, descriptive correlational research designs are used by investigators to describe and measure the degree of relationship between two or more variables [19]. This method is appropriate in this study to identify the perception to educational games and learning attitudes [20].

Research Locale

This study was conducted at St. Mary's College of Bansalan, Inc. Philippines. The respondents were surveyed through research questionnaires. The researchers choose the place of implementation because it will give the researchers the needed amount of information for students with educational games engagement. The study was conducted in the second semester of the academic year 2020-2021



Participants of the Study

The study was conducted between April 2021 and May 2021 using 50 students in all year college level with educational games engagement and their learning attitudes from St. Mary's College of Bansalan, Inc. a private college in Davao del Sur. This study refers to all members of a particular group. The participants selected is 15 students in Education, 15 students in BSBA, 10 students in BSHM, and 10 students in BSIT program

Sampling Techniques

The researchers used the quota sampling technique to select 50 respondents. The quota sampling technique belongs to non-probability sampling [21]. Since St. Mary's College of Bansalan, Inc. has four programs, the researchers used this sampling technique to generate all

respondents as a quota in each Programs that generalized the population. Quota sampling is a method of gathering sample data from a group of the population. It ensures that the sample group represents certain characteristics of the population chosen by the researcher [22]. This sampling technique saves time, and the researchers effectively represent a population using this sampling technique [23].

Statistical Treatments

The data gathered from the questionnaire were collected and presented in tables and subjected to certain statistical treatments.

- Pearson r is known as a method of measuring the association between variables. Also, it gives an information about the magnitude of the association, or correlation, as well as the direction of the relationship of two variables. This is the formula:

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$

Where: N is number of pairs of scores. $\sum xy$ is the sum of the products of paired scores. $\sum x$ is sum of x scores. $\sum y$ the sum of y scores. $\sum x^2$ sum of squared x scores. $\sum y^2$ the sum of squared y scores.

- **T-test** is the analysis of two population's means the use of statistical examination. The formula used to calculate the T Test is,

$$t = \frac{X_1 - X_2}{\sqrt{\frac{S_1^2}{N_1} + \frac{S_2^2}{N_2}}}$$

Where: X_1 is the mean of first data set. X_2 is the mean of first data set. S_1^2 is the standard deviation of first data set. S_2^2 is the standard deviation of first

data set. N_1 is the number of elements in the first data set. N_2 is the number of elements in the first data set

- **ANOVA** was find out if survey or experiment results are significant. In other words, it will help the study to figure out if you need to reject the null hypothesis or accept the alternate hypothesis. Below are the formula represents one-way ANOVA test:

$$F = \frac{MST}{MSE}$$

Where: F is Anova Coefficient. MST is the Mean sum of squares due to treatment. MSE is a Mean sum of squares due to error. Formula for MST is:

$$MST = \frac{SST}{p-1}$$

$$SST = \sum n(x - \bar{X})^2$$

Where: SST sum of squares due to treatment. P is the total number of populations. N or n is the total number of samples in a population. Formula for MSE is:

$$MSE = \frac{SSE}{N-p}$$

$$SSE = \sum (n - 1)S^2$$

Where: SSE is sum of squares due to error. S is Standard deviation of the samples. N is the total number of observations.

Data Collection Procedures

The researchers of this study will undergo the following steps in conducting this study about the Perception to Educational Games and Learning Attitudes of College Students. In conducting this research we will going to follow the schedule of getting the modules in each programs. In administering the questionnaire, the researcher used the time allotted for their vacant time. The student responses were given enough time to answer the questions. After data gathering, the researchers now collected it for applying the scores and applying the statistical treatment to be used with the study.

Research Instrument

This research was adopted from two research studies. The first study is the Students Perceptions of Using Educational Games to Learn Introductory Programming in Malaysia by Roslina Ibrahim, Rasimah Che MohdYusoff, Hasiyah Mohamed, and Azizah Jaafar [24]. This study was conducted in Malaysia to know how educational games can help to enhance our student’s motivation and learning perceptions towards Programming. This study has five constructs: motivation, attitudes, cognitive development, interface and expectation with 24 items. The findings indicated that most students had encouraging positive attitudes were more motivated to learn Programming using games compared to conventional methods [25].

The second study adopted in this research is transforming students’ attitudes towards learning through the use of successful educational actions in Barcelona, Spain by Javier Díez-Palomar, Rocio Garcia – Carrion, Linda Hargreaves, and Maria Vieites [26]. This study was conducted with the purpose of the correlation between attitudes and academic achievements [27]. Also to analyse the impact of interactive groups, and dialog literary gathering on the attitudes that students show towards learning. It was distributed the items with high correlation group work, mutual support, and distributed cognition. In addition, in this study that there is a clear relationship between students attitudes and academic achievement. This research will modified to fit to the study.

Ethical Considerations

The main concern of the study is college students. These are the following standards: consent, respect for the students and confidentiality. Consent and verbal forms were involved in the conduct of the study. Each participant of the study was asked for their permission, approval, and time to answer. The researchers also responsibly hide the participants' identities, kept the notes, transcripts, and other materials used from the conducted survey. It is important to give credits.

III. RESULTS AND DISCUSSION

The presentation of data in this research study are arranged in the following sequence: The demographic profile of the participants of the study in terms of Age Group, Gender, and Program. As the result there are a significant relationship between the perception towards educational games and learning attitudes.

Demographic Profile of the respondents

There are a total of 50 participants in the study, consisting of 10 students in BSIT and BSHM, 15 students in BSBA and Educational Department. In participants, some respondents are among 18 to 25 aged groups which represent the highest percentage. The Statistical tool used are Frequency and Percentage [28]. These are shown in tables I, II, and III.

TABLE I.
 DEMOGRAPHIC PROFILE OF THE RESPONDENTS
Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	22	44.0	44.0	44.0
Femal e	28	56.0	56.0	100.0
Total	50	100.0	100.0	

TABLE II.
DEMOGRAPHIC PROFILE OF THE RESPONDENTS

AGE					
	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid below 18 years old	3	6.0	6.0	6.0	
18-25 years old	42	84.0	84.0	90.0	
26-30 years old	2	4.0	4.0	94.0	
31-40 years old	3	6.0	6.0	100.0	
Total	50	100.0	100.0		

TABLE III.
DEMOGRAPHIC PROFILE OF THE RESPONDENTS

Program					
	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid BSIT	10	20.0	20.0	20.0	
BSHM	10	20.0	20.0	40.0	
BSBA	15	30.0	30.0	70.0	
BEED/BS ED	15	30.0	30.0	100.0	
Total	50	100.0	100.0		

Table IV shows the Demographic profile of the Respondents, which contains frequency and percentage in both terms which are Gender, Age group, and Program (Course).

TABLE IV.
DEMOGRAPHIC PROFILE OF THE RESPONDENTS

Characteristics (n=30)	Level	Frequency	Percentage
Gender	Male	22	44.00%
	Female	28	56.00%
Age Group	Below 18 years old	3	6.00%
	18-25 years old	42	84.00%
	26-30 years old	2	4.00%
	31-40 years	3	6.00%

Program	Frequency	Percent
BSIT	10	20.00%
BSHM/HM	10	20.00%
BSBA	15	30.00%
BSED/BEED	15	30.00%

The level of perception towards educational games among college students in St. Mary's College of Bansalan, Inc.

Shown in table V are the collected results of the level of the perception to educational games college student's in SMCBI. The mean of the level of Motivation on Games is 2.9400 with a Standard Deviation of 0.72871. This means that the level the perception to educational games college student's in St. Mary's College of Bansalan, Inc. in terms of motivation on games is low. The mean level of Cognitive Development is 3.1680 with a standard deviation of 0.87071. This shows that the cognitive development of the respondents is moderate. The mean level of Game Interface is 3.2440 with standard deviation of 0.86877 and it shows that the respondents is moderate. The mean level of Students Expectation is 3.1850 with standard deviation of 0.81255 and it shows moderate.

TABLE V.
DESCRIPTIVE STATISTICS

	N	Minimum	Maximum	Mean	Std. Deviation
MDMean	50	1.40	5.00	2.9400	.72871
CGMean	50	1.80	5.00	3.1680	.87071
GI Mean	50	1.00	5.00	3.2440	.86877
SGMean	50	1.25	5.00	3.1850	.81255
EGMean	50	1.76	5.00	3.1343	.66630
Valid N (listwise)	50				

The level of learning attitudes of among college students in St. Mary's College of Bansalan, Inc.

The table VI are the collected results of the level of learning attitudes among college students in St. Mary's College of Bansalan, Inc. The mean is 3.4567 with a standard deviation of 0.78540. This means that the level of learning attitudes among college students is moderate.

Table 6. The level of learning attitudes

TABLE VI.
DESCRIPTIVE STATISTICS

	N	Minimum	Maximum	Mean	Std. Deviation
LA Mean	50	1.42	4.67	3.4567	.78540
Valid N (listwise)	50				

A significant difference on the level of perception towards educational games when grouped according to Gender.

TABLE VII.
ANOVA DISTRIBUTION OF RESPONDENTS' SIGNIFICANT DIFFERENCE ON THE LEVEL OF PERCEPTION TOWARDS EDUCATIONAL GAMES WHEN GROUPED ACCORDING TO GENDER.

ANOVA (GENDER)

EGMean	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.000	1	.000	.000	.995
Within Groups	21.754	48	.453		
Total	21.754	49			

Since, p-value 0.395 > 0.05 then we do not reject the null hypothesis. There is significant difference on the level of perception towards educational games according to gender. No Post Hoc Test is necessary.

TABLE VIII.
SIGNIFICANT DIFFERENCE ON THE LEVEL OF PERCEPTION TOWARDS EDUCATIONAL GAMES ACCORDING TO GENDER

Test Variables (ANOVA)	Age Group	Mean	Std. Deviation	F	Sig.	Decision

Level of Perception towards Educational Games	Male	3.1335	0.59202	0.00	0.99	Accept HO
	Female	3.1348	0.73014			
Total		3.1343	0.66630			

The level of perception towards educational games when grouped according to Age group.

TABLE IX.
ANOVA DISTRIBUTION OF RESPONDENTS' LEVEL OF PERCEPTION TOWARDS EDUCATIONAL GAMES WHEN GROUPED ACCORDING TO AGE GROUP.

ANOVA (AGE)

EGMean	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.581	3	.194	.421	.739
Within Groups	21.173	46	.460		
Total	21.754	49			

Since, p-value 0.739 > 0.05 then we do not reject the null hypothesis. There is no significant difference on the level of perception towards educational games according to age group. No Post Hoc Test is necessary.

TABLE X.
SIGNIFICANT DIFFERENCE ON THE LEVEL OF PERCEPTION TOWARDS EDUCATIONAL GAMES ACCORDING TO AGE GROUP

Test Variables (ANOVA)	Age Group	Mean	Std. Deviation	F	Sig.	Decision
Level of Perception towards Educational Games	Below 18 years old	2.7833	0.89376	0.42	0.73	Accept HO
	18-25 years old	3.1646	0.68141			
	26-30 years old	2.8688	0.53917			
	31-40 years	3.2375	0.35200			

old		
Total	3.134	0.66630
	3	

Perception towards educational games when grouped according to Program (Course).

TABLE XI.
ANOVA DISTRIBUTION OF RESPONDENTS' PERCEPTION TOWARDS EDUCATIONAL GAMES WHEN GROUPED ACCORDING TO PROGRAM (COURSE).

ANOVA (COURSE)

EGMean					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.012	3	1.004	2.464	.074
Within Groups	18.742	46	.407		
Total	21.754	49			

Since, p-value 0.074 > 0.05 then we do not reject the null hypothesis. There is no significant difference on the level of perception towards educational games according to program. No Post Hoc Test is necessary.

TABLE XII.
SIGNIFICANT DIFFERENCE ON THE LEVEL OF PERCEPTION TOWARDS EDUCATIONAL GAMES ACCORDING TO PROGRAM

Test Variables (ANOVA)	Age Group	Mean	Std. Deviation	F	Sig.	Decision
Level of Perception towards Educational Games	BSIT	2.927	0.32236	2.46	0.07	Accept HO
	BSHM/H	2.755	0.73653	4	4	
	M	0				
	BSBA	3.335	0.64624			
	BSED/BE	3.323	0.71004			
Total	3.134	0.66630				

A significant difference on the level of learning attitudes when grouped according to Gender.

TABLE XIII.
ANOVA DISTRIBUTION OF RESPONDENTS' SIGNIFICANT DIFFERENCE ON THE LEVEL OF LEARNING ATTITUDES WHEN GROUPED ACCORDING TO GENDER.

ANOVA (GENDER)

LAMean					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.213	1	.213	.341	.562
Within Groups	30.013	48	.625		
Total	30.226	49			

Since, p-value 0.562 > 0.05 then we do not reject the null hypothesis. There is no significant difference on the level of learning attitudes according to gender. No Post Hoc Test is necessary.

TABLE XIV.
SIGNIFICANT DIFFERENCE ON THE LEVEL OF LEARNING ATTITUDES ACCORDING TO GENDER

Test Variables (ANOVA)	Age Group	Mean	Std. Deviation	F	Sig.	Decision
Level of Learning Attitudes	Male	3.530	0.76443	0.21	0.56	Accept HO
	Female	3.398	0.81060	3	2	
	Total	3.456	0.78540			

The level of learning attitudes when grouped according to Age Group.

TABLE XV.
ANOVA DISTRIBUTION OF RESPONDENTS' LEVEL OF LEARNING ATTITUDES WHEN GROUPED ACCORDING TO AGE GROUP

ANOVA (AGE)

LAMean					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.576	3	.525	.844	.477
Within Groups	28.649	46	.623		
Total	30.226	49			

Since, p-value $0.477 > 0.05$ then we do not reject the null hypothesis. There is no significant difference on the level of learning attitudes according to age group. No Post Hoc Test is necessary.

TABLE XVI.
SIGNIFICANT DIFFERENCE ON THE LEVEL OF LEARNING ATTITUDES ACCORDING TO AGE GROUP

Test Variables (ANOVA)	Age Group	Mean	Std. Deviation	F	Sig.	Decision
Level of Learning Attitudes	Below 18 years old	3.111	0.71847	0.84	0.47	Accept HO
	18-25 years old	3.470	0.79863			
	26-30 years old	2.958	0.05893			
	31-40 years old	3.944	0.85527			
	Total	3.456	0.78540			

Level of learning attitudes when grouped according to Program.

TABLE XVII.
ANOVA DISTRIBUTION OF RESPONDENTS' LEVEL OF LEARNING ATTITUDES WHEN GROUPED ACCORDING TO PROGRAM.

ANOVA (PROGRAM)					
LAMean	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.713	3	1.238	2.147	.107
Within Groups	26.513	46	.576		
Total	30.226	49			

Since, p-value $0.107 > 0.05$ then we do not reject the null hypothesis. There is no significant

difference on the level of learning attitudes according to program. No Post Hoc Test is necessary.

TABLE XVIII.
SIGNIFICANT DIFFERENCE ON THE LEVEL OF LEARNING ATTITUDES ACCORDING TO PROGRAM

Test Variable	Age Group	Mean	Std. Deviation	F	Sig.	Decision
Level of Learning Attitudes	BSIT	3.325	0.86821	2.14	0.10	Accept HO
	BSHM/HM	3.008	0.95779			
	BSBA	3.533	0.53988			
	BSED/BEED	3.766	0.72662			
	Total	3.456	0.78540			

A significant relationship between the level of perception towards educational games and learning attitudes among college students in St. Mary's College of Bansalan, Inc.

TABLE XIX.
CORRELATIONS

	EGMean	LAMean
EGMean	Pearson Correlation	1
	Sig. (2-tailed)	.666**
	N	50
LAMean	Pearson Correlation	.666**
	Sig. (2-tailed)	.000
	N	50

** . Correlation is significant at the 0.01 level (2-tailed).

Table 13 shows the positive correlation between the perception towards educational games and learning attitudes. Since, p-value is $0.000 < 0.05$, then we reject the null hypothesis. There is a significant relationship between the perception towards educational games and learning attitudes. With the r-value of 0.666, the perception towards educational games and learning attitudes has strong positive relationship.

TABLE XX.
CORRELATIONS BETWEEN PERCEPTIONS ON EDUCATIONAL GAMES AND LEARNING ATTITUDES

Variables	Mean	SD	r-value	p-value
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Perceptions on Educational Games Learning Attitudes	3.1343	0.66680	0.666	0.000
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The results of the research conducted to examine whether there is a relationship between perception to educational games and learning attitudes in St. Mary's College of Bansalan, Inc. The null hypothesis is not rejected in the two variables.

It has shown great motivation to use the games especially in doing their exercises, and games somehow that makes more interesting [29]. This indicated that games might be suitable as motivation among student. The use of games may be one of the solutions that might arouse student interest to learn [30]. Students also show positive attitudes in using games and they have acknowledged their cognitive development such as thinking critically and challenging their understanding [31].

Attitude refers to a learned tendency of a person to respond positively or negatively towards an object, situation, a concept, or a person [32]. It is also regarded as a belief held by individuals that reflects their opinions and feelings and can be sometimes manifested in behaviour. Also influence the relationships that exist among these variables with themselves. And it was found in terms of attitudes towards learning, the characteristics of the student group should be considered in the evaluation of the findings [33].

In this research shows that there is no significant difference on the level of perception to educational games and learning attitudes of the student's.

IV. CONCLUSIONS

In this study, the researchers addressed the perception to educational games and learning attitudes in college students of St. Mary's College of Bansalan, Inc. There are 50 students selected as a respondents to be participated. The results shows that all indicators in the level of perception to educational games are in moderate. As the

correlation result shows the positive correlation between the perception towards educational games and learning attitudes. There is a significant relationship between the perception towards educational games and learning attitudes. With the r-value of 0.666, the perception towards educational games and learning attitudes has strong positive relationship. It has also found out that games can be used as an educational mechanism.

A number of internet users nowadays are rapidly increasing, and can affect to the people's education. In this research it will recommended to determine the interest each of the student, and help them to be more responsible. Also, to determine for the significant relationship not only for the students, but for all the people who involve of this educational games. Furthermore, it has shown above that there is a significant relationship between the perception to educational games and learning attitudes of the students.

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REFERENCES

- [1] B. T. J. G. R. Chamberlin, "The Learning Games Design Model: Immersion, Collaboration, and Outcomes-driven Development. *Int. J. Gamed-Based Learn*," *IJGBL*, vol. 2(3), pp. 87-110.
- [2] E. Andersen, "Optimizing Adaptivity in Educational Games. In *Proceedings of the International Conference on the Foundations of Digital Games*," ACM, no. New York, pp. 279-281, May 2012.
- [3] R. S. J. d. D. S. K. R. M. M. T. & G. Baker, "Better to be Frustrated than Bored The Incidence, Persistence, and Impact of Learners' Cognitive-Affective States During Interactions with Three Different Computer-Based Learning Environments," *Human-Computer Studies*, Vols. 68,, pp. 223-241, 2010.
- [4] A. Bandura, "Social Cognitive Theory in Cultured Context,," *Applied Psychology*, vol. 51, pp. 269-290, 2002.
- [5] N. K. W. W. & P. D. b. m. e. y. m. i. d. g. p. A. w. I. A. P. R. P. & R. W. P. E. Bianchi-Berthouze, "Affective computing and intelligent interaction," pp. 21-34, 2007.
- [6] B. B. P. & M. A. Cooper, "Effective Affective in Intelligent Systems—Building on Evidence of Empathy in Teaching and Learning. In *Affective Interactions*," pp. 21-34, 2000.
- [7] N. Yee, " Motivations for Play in Online Games. *CyberPsychology&Behavior*,," August, 7 , 2009.
- [8] E. O. S. & S. K. Klopfer, " Moving learning Games Forward, Obstacles Opportunities& Openness. Cambridge MA:MIT/The Education Arcade," 2009.
- [9] J.Kagan., ""Human behavior," Retrieved from <https://www.britannica.com/topic/human-behavior> .
- [10] G. & J. P. Denis, "Motivation-Driven Educational Game Design," *ACM SIGCHI International Conference on Advances in Computer Entertainment*, Valencia , Spain, 2005.
- [11] W. W. b. T. M. C. a. L. B. a. G. B. a. R. B. B. a. M. S. Thomas Hainey a, "Students Attitudes Toward Playing Games and Using Games in Education," Content list Available at Sciencedirect Computers & Educational Journal.
- [12] A. Rubijesmin, "Understanding Malaysian Student as Gamers In *Proceedings of the 2nd International Conference on Digital, Entertainment and Arts*, 2007.
- [13] R. C. M. Y. H. M. A. J. Roslina Ibrahim, ""Student Perceptions of Using Educational Games to Learn" *Computer and Information Science* www.scenet.org/cis, vol. 4, no. 1, p. 11, January 2011.
- [14] A. & S. R. Amory, "Educational Games Models: Conceptualization and Evaluation," *South Africa Journal of Higher Education*, vol. 17(2), pp. 206-217, 2003.
- [15] B. Winn, "The Design , Play, and Experienced Framework In: *Handbook of Research on Effective Electronic Gaming in Education*," *ISR*, Vols. vol,3, no. New York, pp. 1010-1024, 2009.
- [16] J. Brown, "Situated Cognition and the Culture of Learning," *Educational Researcher*, vol. 18(1), pp. 32-42, 1989.
- [17] P. Bouvier, "" Defining Engagement and Characterizing Engaged-Behaviors in Digital Gaming",," 2014.
- [18] J. A. a. L. Raine., " Main findings: Teens, technology, and human potential in 2020," (2012)..
- [19] MV. Buladaco et al., " "The Relationship of Technology as a Learning Tool to Student Motivation in Education among College Students in Davao Del Norte State College",," *International Journal of Research and Innovation in Social Science (IJRISS)*, vol. Volume IV, no. VI, pp. ISSN 2454-6186, June 2020.
- [20] M. B. M. Sobhani, "Attitudes toward the Effectiveness of Communicative and Educational Language Games and Fun Activities in Teaching and Learning English," *Theory and Practice in Language Studies*, 2014.
- [21] R. C. M. Y. Roslina Ibrahim, "Students Perceptions of Using Educational Games to Learn," *Vols. Vol. 4., pp. 205-216*, January 2011.