



Evaluating factors affecting continuance intention toward E-sports

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Abstract

Nowadays, E-sports became a fast growing industry that have changed remarkably. E-sports is spread over the societies due to the dramatic environmental changes such as pervasiveness of the online trend. This paper investigated the role of the enjoyment, competence, perceived ease of use, perceived usefulness and satisfaction on continuance intention to adopt E-sports. A self-administrated questionnaire is developed using snowball sampling technique during January and February 2023 applying SPSS version 24 to test the current research hypotheses. The current paper revealed that enjoyment, perceived usefulness and satisfaction are positively affected continuance intention to adopt E-sports. However, the findings indicated that competence and perceived ease of use have insignificant effect of continuance intention toward E-sports. This study is considered as one of the few research conducted to analyze continuance intention toward E-sports. The current study introduce several contributions on the theoretical and practical levels that enhancing both marketing literature and decision makers in the domain of applications' designers, programmers and E-sport exercises trainers. Finally, the limitations and future research are also presented in this research.

Introduction

In this new technological age, the world has moved more towards using the Internet as a medium for a variety of purposes. From finding information to set up businesses, the Internet has become a part of daily life for many people. This also comes to affect entertainment, giving rise to a new way to broadcast events, and with this ability, the Internet allows entrepreneurs and companies to reach millions of viewers. One of the largest growing forms of entertainment is e-Sport (Southern, 2017).

E-sports is where players employ their mental and physical capabilities to participate in effective, electric and virtual numbers of players (Witkowski, 2012). E-sports includes single or group players to compete with each other's by playing electronic sports on virtual platforms and it also contains social connections through several interactions possibilities (voice, narration, chat, messaging...). E-sports is the wildest developing sport internationally, with lots of players and billions of followers (Çetin & Coşkuner, 2021).

E-sports is considered as “recreational activity involving competition using mental and physical abilities in a virtual online environment similar to the reality” and includes “various competitions and leagues involving network games” (Lee, An & Lee, 2014). Millennial is informed to own a smartphone that they are able to enroll in E-sports game or to participate in a new sport platform (Bányai et al., 2019). For example, in Mobile Legend that was considered as a new trend,

teenagers were willing to play with their contacts (Jang & Byon, 2020). In order to success, operators simply want to accomplish the core objective of the game where the procedure of the game are simply acquired (Sun et al., 2017).

While the study of computer games, in general, is slowly becoming accepted in the academic world, the scientific investigation of competitive computer gaming is still in its infancy. Almost any attempted academic discussion is immediately locked into a debate about game ethics. This debate, however, represents only a small part of the whole spectrum of competitive computer gaming that should be of interest to academia. Unfortunately, some e-Sport games do not get succeed as others. Because of the inadequate attention which caused cancellation of games and the low award, players left the game. Understanding e-Sport is complex because of the relative novelty of the industry as well as the convergence of culture, technology, sport, and business (Harun, 2018). Nevertheless, playing games has side effects. Players that involved between 3 and 10 hours per day frequently complaint of eye fatigue (56%), neck and back pain (42%), wrist pain (36%), and hand pain (32%). Separately from having physical issue, individuals who play E-sport can also suffer from mental issue such as anxiety, sleep disorder and depression. Also, they waste their time in front the screen and become antisocial (Zwibel, Donoghue, DeFeo & Yao, 2019). According to Yilmaz et al. (2022), adults preferred playing video games than playing with friends. Accordingly, this also result

person to have low self-esteem. Lastly, it was illustrated that learners who play e-sport had lower academic performance comparing to learners who did not (Wright et al., 2011).

This study will investigate elements affecting the continuance intention to adopt E-sports applications, these factors are as follow: enjoyment, competence, perceived ease of use (PEOU), perceived usefulness (PU) and satisfaction.

1. Variables Conceptualizations

This section discusses how the factors in the research are categorized, starting with the dependent variable, continuance intention to adopt E-sports, which may be impacted by five independent variables: Enjoyment, competence, perceived ease of use, perceived usefulness and satisfaction.

1.1. Continuance intention to adopt E-sports

Continuance intention is described as the operator's strategies to stay expending the accepted schemes (Marcelino & Rafdinal, 2021). In addition, continuance intention is important in joining or pleasing in such platform (Hooi & Cho, 2017). It is a critical communication result for identifying the supportable achievement of E-sports (Kim & Kim, 2020). It is the degree of a tendency to stay expending services such as E-sports (Sharma et al., 2022).

Enjoyment

Enjoyment is a part of happiness. It is the synonymous of pleasure that is considered as a part of the hedonic approach to wellbeing (Waterman et al., 1993). Enjoyment can be described as a positive emotional state that happens when an individual involves in a practice that fulfills a wish, objective, or want. Academics can evaluate individual's enjoyment of involving in a real mission or action (e.g., sports or exercise) (Tamborini et al., 2011).

1.2. Competence

Competence is intellectualized in relations with awareness, capabilities, talents, and approaches showed in the situation of a wisely selected to fixed of accurate professional task that are of a suitable level of generalization (Gonczi et al., 1990). Competence is an essential need for well-being (Uysal et al., 2016). Competence is the must for mastery and efficiency, in other words, the requirement to do something (Ryan & Deci, 2017). It is significant to consider the components that make up the difficulty to generate a capable operator (Su & Swanson, 2019).

1.3. Perceived ease of use (PEOU)

PEOU is defined as “the degree to which a person believes that using a particular system would be free of effort” (Davis et al., 1985). In addition, perceived of ease of use is defined as the degree to which an individual when expending a specific scheme does not want more or easier power (Merikivi, Tuunainen & Nguyen, 2017). Therefore, if a

platform is easy to employ, operators will be more eager to acquire the platform's characteristics and finally intend to continue employing it.

1.4. Perceived Usefulness (PU)

PU is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance." This came from the word useful: "capable of being used advantageously." Within a workplace, individuals are strengthened to perform well through rewards, compensations, bonuses and bonuses (Pfeffer et al., 1982). According to Davis et al., (1992), PU refers to customers' opinions concerning the consequence of the experience. Davis et al., (1993) described PU as the person's opinion that expending new technology to improve or develop her/his performance. Similarly, Mathwick et al., (2001) described PU as the level to which an individual believes in the platform to increase his or her career performance. According to (Guriting & Ndubisi, 2006) usefulness is the subjective probability that employing the technology would advance the way an operator could accomplish his task, this construct forms different lessons based on incentive, beliefs and information systems (Garcia, Cañadillas & Charterina, 2016).

1.5. Satisfaction

Customer satisfaction is described as the consumer's success in reaction (Oliver et al., 1997). It is an evaluation that a service characteristic, or the service itself, offers an enjoyable degree of consuming related gratification. In other words, it is the overall

level of contentment with a service experience. Alexandris et al., (2004) described satisfaction as consumers' assessment of a service in terms of whether that service has met their requirements and needs, because it is based on set standard, which can be expectations and beliefs (Sirgy et al., 2012).

2. Literature Review and Hypotheses Development

This part will discuss the relationships among the independents variables and the continuance intention to adopt E-sports.

2.1. The effect of enjoyment on continuance intention to adopt E-sports

Enjoyment is an inherent incentive that highlights operators' practice and action and reveals the entertaining. Enjoyment is related to employing schemes in technology such as E-sports (Teo & Noyes, 2011). Several studies on E-sports have shown a positive relationship between perceived enjoyment and continuous intention in various environments; for example, mobile games (Merikivi, Nguyen & Tuunainen, 2016) and free-to-play games (Hamari, Hanner & Koivisto, 2020). According to these studies, the hypotheses will be formulated as follows.

H1: Enjoyment directly and positively influences Continuance Intention to adopt E-sports.

2.2. The effect of competence on continuance intention to adopt E-sports

A study conducted by Ryan, Rigby & Przybylski, (2006) finds that competence leads to continuance intention. The requirement for competence has a critical link towards behavioral continuous play and preference for future play (Ryan, Rigby & Przybylski, 2006). In addition, according to Oduor and Oinas-Kukkonen, (2017) found that the competence has the strongest effect on continuance intention. In addition, a positive relationship exist between competence and continuance intention (Marcelino et al., 2021). Thus, the hypothesis will be developed as follows:

H2: Competence directly and positively influences Continuance Intention to adopt E-sports.

2.3. The effect of perceived ease of use (PEOU) on continuance intention to adopt E-sports

A study indicated that PEOU is positively associated with continuance intention in the context of Web-based learning (Humbani & Wiese, 2019). Moreover, a positive association excites between PEOU and continuance intention to adopt video games and e-sports in several contexts (Suki et al., 2012; Linares et al., 2021; Lai & Chong, 2021). Therefore, the hypotheses will be formulated as follows:

H3: Perceived ease of use directly and positively influences Continuance Intention to adopt E-sports.

2.4. The effect of perceived usefulness on continuance intention to adopt E-sports

According to several studies, PU is positively associated with continuance intention in the context of instant messaging (Wang, Ngai & Wei, 2012), mobile service provider (Abbas & Hamdy, 2015), online travel services (Li & Liu, 2014) e-learning (Lin & Wang, 2012) blog learning (Tang, Tang & Chiang, 2014), information establishment (Chou, Min, Chang & Lin, 2009). Moreover, previous studies indicated that there is a positive relationship between perceived usefulness and continuance intention (Suki et al., 2012; Pantouw & Aruan, 2019). Hence, the hypotheses will be formulated as follows.

H4: Perceived usefulness directly and positively influences Continuance Intention to adopt E-sports

2.5. The effect of satisfaction on continuance intention to adopt E-sports

Latest studies showed that the satisfaction has a positive effect on continuance intention (Chen, et al., 2009; Hadji & Degoulet, 2016). In addition, according to Joo et al., (2017), satisfaction is considered the more powerful factor that influencing the continuance intention to use (Chow & Shi, 2014). Hence, the hypotheses will be formulated as follows.

H5: Satisfaction directly and positively influences Continuance Intention to adopt E-sports.

3. Conceptual Framework

The conceptual framework shows the relationship between variables used in this study as follows:

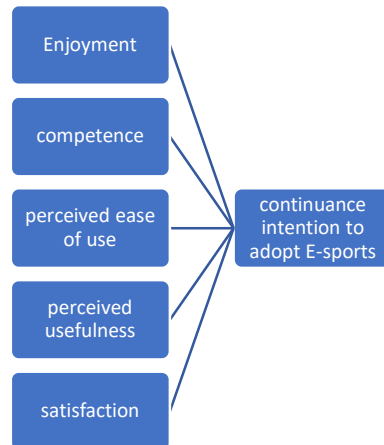


Figure 1. Research Conceptual Framework

3.1. Population

All Lebanon residents who took up E-sports during the COVID-19 pandemic. Since this group is most likely to continue to adopt E-sport during the COVID-19 pandemic, sampling was restricted to people who were at least 16 years old and of both genders.

3.2. Sampling

The sample consists of a group of people who were asked to fill up questionnaire about consumer adoption of E-sports in Lebanon during the COVID-19 pandemic. It reflects a subset of the population that shares what consumer did in the pandemic with E-sports applications. In this research, population is credited with the analysis and conclusion.

Convenience sampling, a type of non-probability sampling utilized in this study, involves choosing a sample from a subset of the local population. In fact, the larger the samples, the more complicated and diversified the subject. A self-administered online questionnaire submission was used to collect data in a quantitative, descriptive manner. The questionnaire were distributed to 300 participants. However, the data collected were 200 participants through Google form.

3.3. Descriptive Analysis

Additionally, the data was examined using the SPSS statistics tool, and the outcomes were displayed as tables. The survey questions used descriptive analysis to characterize respondents' demographic characteristics, such as age, gender, marital status, and level of education.

3.4. Sample Profiling

Demographics are the different features of a population that characterize it, such as age, race, ethnicity, education, economic level, and so on.

Table 1. Descriptive Statistic for Gender

Descriptive Statistic for Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	81	40.5	40.5	40.5
	Male	119	59.5	59.5	100.0
	Total	200	100.0	100.0	

Source: SPSS version 28.0

Table 2 represents the gender of the 200 respondents in Lebanon. The Female percent is (40.5 %) and Male percent is (59.5 %). The results shows that males are higher than females.

Table 2. Descriptive Statistic for Age

Descriptive Statistic for Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	16-20	28	14.0	14.0	14.0
	21-30	119	59.5	59.5	73.5
	31-40	33	16.5	16.5	90.0
	41-50	9	4.5	4.5	94.5
	50 years and above	11	5.5	5.5	100.0
	Total	200	100.0	100.0	

Source: SPSS version 28.0

Table 3 represents the age of the respondents in Lebanon. Analysis of the data collected showed that the valid percent were (14%) for 16 to 20 years old, (59.5%) for 21 to 30 years old, (16.5%) for 31 to 40 years old, (4.5%) for 41 to 50 years old, (5.5%) for 51 years and above. The results shows that highest respondents were between 21 to 30 years old in Lebanon.

Table 3. Descriptive Statistic for Marital Status

Descriptive Statistic for Marital Status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Divorced	11	5.5	5.5	5.5
	Married	46	23.0	23.0	28.5
	Single	143	71.5	71.5	100.0
	Total	200	100.0	100.0	

Source: SPSS version 28.0

Table 4 shows the marital status of the respondents in Lebanon, where divorced valid percent is (5.5%), married valid percent is (23%), and single valid percent is (71.5%). In Lebanon, the percentage of single respondents is the highest.

Table 4. Descriptive Statistic for Education Level

Descriptive Statistic for Education Level					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor's degree	120	60.0	60.0	60.0
	Elementary high school	12	6.0	6.0	66.0
	High school diploma or equivalent	22	11.0	11.0	77.0
	Master's degree	33	16.5	16.5	93.5
	PHD or DBA degree	13	6.5	6.5	100.0
	Total	200	100.0	100.0	

Source: SPSS version 28.0

Table 5 shows the respondents' educational levels in Lebanon. The data indicates that bachelor's degree represents (60%), those with elementary high school represent (6%) of valid percent, those with a high school diploma or equivalent represent (11%) of valid percent, those with a master's degree represent (16.5%) of valid percent, and those with a PHD or DBA degree representing (6.5%) of valid percent. Most respondents in Lebanon had a bachelor's degree.

Table 5. Using E-sports Frequency

Using E-sports Frequency					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Several time per month	31	15.5	15.5	15.5
	Several time per week	107	53.5	53.5	69.0
	Several time per year	16	8.0	8.0	77.0
	Very seldom	46	23.0	23.0	100.0
	Total	200	100.0	100.0	

Source: SPSS version 28.0

Table 6 shows the respondents' using E-sport applications frequency in Lebanon. The data indicates that who use E-sports applications several times per month representing (15.5%) of valid percent, those who use E-sports applications several times per week representing (53.5%) of valid percent, those who use E-sports applications several times per year representing (8%) of valid percent, and those who very seldom use E-sports applications representing (23%) of valid percent. Most

respondents in Lebanon almost use E-sports applications several time per week according to table 6.

3.5. Descriptive Statistics for Variables

The descriptive statistics is used to characterize the qualities of the data acquired to react to the study's aim. This study presents the sample's characteristics and data.

Table 6. Means and Standard Deviations

Means and Standard Deviations						
	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Enjoyment	200	1.00	5.00	3.9575	.84514	.714
Competence	200	1.00	5.00	3.9217	.86883	.755
PEOU	200	1.50	5.00	3.5583	.61838	.382
PU	200	1.50	5.00	3.6163	.58180	.338
Satisfaction	200	1.50	5.00	3.9600	.84079	.707
Intention to adopt E-sports	200	1.00	5.00	4.0300	.86639	.751
Valid N	200					

Source: SPSS version 28.0

Table 7 illustrates the descriptive statistics for the five independent variables of this research in relation to its questions that describe the factors influencing customers' continuance intention to adopt E-sports during COVID-19 in Lebanon.

Descriptive statistics for customers' enjoyment, the four questions that describe the factors influencing customers' continuance intention to adopt E-sports during COVID-19, where 1 represents strongly disagree and 5 represents strongly agree.

Descriptive statistics for customers' competence, the three questions that describe the factors influencing customers' continuance intention to adopt E-sports during COVID-19, where 1 represents strongly disagree and 5 represents strongly agree.

Descriptive statistics for customers PEOU, the six questions that describe the factors influencing customers' continuance intention to adopt E-sports during COVID-19, where 1 represents strongly disagree and 5 represents strongly agree.

Descriptive statistics for customers PU, the four questions that describe the factors influencing customers' continuance intention to adopt E-sports during COVID-19, where 1 represents strongly disagree and 5 represents strongly agree.

Descriptive statistics for customers' satisfaction, the four questions that describe the factors influencing customers' continuance intention to adopt E-sports during COVID-19, where 1 represents strongly disagree and 5 represents strongly agree.

Descriptive statistics for continuance intention to adopt E-sports, the three questions that describe the factors influencing customers'

continuance intention to adopt E-sports during COVID-19, where 1 represents strongly disagree and 5 represents strongly agree.

3.6. Reliability Analysis

The Cronbach alpha test was thought to be a test that evaluates the reliability and internal consistency of a questionnaire that contains several Likert scales and questions. Cronbach alpha is based on the replies provided for each variable (Sekaran & Bougie, 2010). The Cronbach alpha coefficient is a psychometric statistic used to assess the internal consistency or reliability (internal validity) of test questions, or how closely attached a group of items is. Alpha Cronbach's alpha is regarded as a reliability measuring scale.

Table 7. Cronbach Alpha

	Items	Cronbach's Alpha if Item Deleted
Enjoyment	4	.941
Competence	3	.944
PEOU	6	.954
PU	4	.959
Satisfaction	4	.942
Intention to adopt E-sports	3	.946

Source: SPSS version 28.0

According to (Iacobucci & Duhachek, 2003) the coefficient should be greater than 0.7 to be acceptable. The alpha coefficients for enjoyment, competence, PEOU, PU, satisfaction, and continuance intention to adopt E-sports were (0.941), (0.944), (0.954), (0.959), (0.942), and (0.946) respectively as shown in the table 8 above.

3.7. Validity

The Kaiser-Meyer-Olkin (KMO) Test assesses how well the given data is suited for factor analysis. KMO determines how sufficient each variable in the model is in respect to the overall model. This statistic examines the variation level that may be shared by the variables. The lower this level, the more suited the data is.

Table 8. KMO Validity Test

Variables	KMO	P
Enjoyment	0.842	<.001
Competence	0.749	<.001
PEOU	0.805	<.001
PU	0.809	<.001
Satisfaction	0.850	<.001
Intention to adopt E-sports	0.740	<.001

Source: SPSS version 28.0

The KMO test was used to assess the sampling appropriateness of each model element and to forecast if the questionnaire objects were likely

to be factored based on the partial correlation and correlation. The KMO test has a range of 0 to 1.0.

Table 9. ANOVA

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	124.140	5	24.828	190.869	<.001 ^b
	Residual	25.235	194	.130		
	Total	149.376	199			
a. Dependent Variable: intention to adopt E-sports						
b. Predictors: (Constant), Satisfaction, PU, PEOU, Competence, Competence, Enjoyment						

Source: SPSS version 28.0

3.8. Correlation Coefficient

Pearson's Correlation Coefficient Correlation is a statistical measure of the relationship between two variables. There might be a positive (as one rises, the other falls) or negative (as one rises, the other falls) link. Correlation strength can range from poor to strong. Pearson Product Moment Correlation, sometimes known as Pearson Correlation, is one of the most widely used correlation statistics (Emerson, 2015). The correlation coefficient, r , denotes the degree and direction of a linear relationship between two variables, x and y . The linear model's dependability, on the other hand, is determined by the quantity of observed data points in the sample. The correlation coefficient r and sample size n must be considered simultaneously (Schober et al., 2018).

The results are presented in a matrix such that, as can be seen table 11, the correlations are replicated. The table presents the coefficient of correlation, the value of its significance and the size of the sample. What's important in this table is the value of Pearson' r – which varies between +1 and -1, where +1 is a perfect positive correlation, and -1 is a perfect negative correlation. 0 means there is no linear correlation at all and the correlation coefficient that can be sig if it is <0.05.

Table 10. Table of correlation

		Correlations					
		Enjoyment	Competence	PEOU	PU	Satisfaction	Intention
Enjoyment	Pearson Correlation	1	.902**	.767**	.716**	.903**	.876**
	Sig. (2-tailed)		<.001	<.001	<.001	<.001	<.001
	N	200	200	200	200	200	200
Competence	Pearson Correlation		1	.781**	.720**	.874**	.817**
	Sig. (2-tailed)			<.001	<.001	<.001	<.001
	N		200	200	200	200	200
PEOU	Pearson Correlation			1	.785**	.766**	.730**
	Sig. (2-tailed)				<.001	<.001	<.001
	N			200	200	200	200
PU	Pearson Correlation				1	.702**	.712**
	Sig. (2-tailed)					<.001	<.001
	N				200	200	200
Satisfaction	Pearson Correlation					1	.893**
	Sig. (2-tailed)						<.001
	N					200	200
Intention to adopt E-sports	Pearson Correlation						1
	Sig. (2-tailed)						
	N						200

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

Source: SPSS version 28.0

Related to enjoyment and continuance intention to adopt E-sports, researchers discovered strong and positive correlation association between enjoyment and

continuance intention to adopt E-sports since the correlation coefficient was positive and ranged greater than 0.5 ($r = 0.876$).

Related to competence and continuance intention to adopt E-sports, researchers discovered strong and positive correlation association between competence and continuance intention to adopt E-sports since the correlation coefficient was positive and ranged greater than 0.5 ($r = 0.817$).

Related to PEOU and continuance intention to adopt E-sports, researchers discovered strong and positive correlation association between PEOU and continuance intention to adopt E-sports since the correlation coefficient was positive and ranged greater than 0.5 ($r = 0.730$).

Related to PU and continuance intention to adopt E-sports, researchers discovered strong and positive correlation association between PU and continuance intention to adopt E-sports since the correlation coefficient was positive and ranged greater than 0.5 ($r = 0.712$).

Related to satisfaction and continuance intention to adopt E-sports, researchers discovered strong and positive correlation association between satisfaction and continuance intention to adopt E-sports since the correlation coefficient was positive and ranged greater than 0.5 ($r = 0.893$).

The coefficient correlations range from +0.712 to +1. When the value of the coefficients increases, it suggests that the relation between the variables is becoming stronger. Table13 demonstrates that the variables are greater than zero, demonstrating a positive association between continuance intention to adopt E-sports and factors (enjoyment, competence, PEOU, PU, and satisfaction). This table demonstrates that the variables have a substantial linear connection. The regression line can be used to model the population's linear connection between variables

3.9. Multi Collinearity of Independent variables:

Multi collinearity occurs when there is a correlation between independent variables in a regression model. This is contested since the study's independent variables should be independent. Tolerance and its inverse variance inflation factor, commonly known as VIF, are examples of collinearity statistics. VIF defined the variance of a model produced with only one term by the variance of a model constructed with multiple parameters in the model that encapsulates other components. In an ordinary test squares regression analysis, it evaluates the severity of multi-collinearity. Because to collinearity, the variance of a calculated regression coefficient is increased.

Table 11. Collinearity Statistics

Collinearity Statistics			
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	PU	.349	2.869
	PEOU	.275	3.637
	Competence	.155	6.467
	Enjoyment	.128	7.795
	Satisfaction	.160	6.235
a. Dependent Variable: intention to adopt E-sports			

Source: SPSS version 28.0

To detect multicollinearity, the variance inflation factor and its inverse, tolerance, can be utilized (VIF). When the tolerance value is less than 0.2 or 0.1 and the VIF value is 10 or above, multicollinearity is a problem. As shown in table 12, the tolerance is more than 0.5, but the

VIF quantities are all less than 10, suggesting that there is no multi-collinearity.

3.10. Hypotheses Testing Using Multiple Linear Regression Analysis

Hypothesis testing is a statistical technique for evaluating a hypothesis about a population parameter by an analyst. Hypothesis testing is the process of evaluating the plausibility of a hypothesis using sample data. This data might come from a larger population or a data gathering system. Table 13 shows the R, R square, adjusted R square, and standard error of the estimate, which may be used to assess how well a regression model fits the data

Table 12. Model summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.912 ^a	.831	.827	.36066
a. Predictors: (Constant), Satisfaction, PU, PEOU, Competence, Competence, Enjoyment				
b. Dependent Variable: Intention to adopt E-sports.				

Source: SPSS version 28.0

The value of the multiple correlation coefficient's R is displayed in the R column. R may be seen of as one measure of the quality of the dependent variable's prediction; in this situation, R= 0.912 indicates a good degree of prediction. The value of R square, commonly known as the determination coefficient, is represented as "R square." In this case,

the value of R square is 0.831, indicating that the independent variables (enjoyment, competence, PEOU, PU, satisfaction,) explain 82.7% of data variance is explained by the linear regression of the dependent variable consumer continuance intention to adopt E-sports during the COVID-19 pandemic

3.11. Regression Analysis

MLR, also known as multiple linear regression, is a statistical approach that predicts the result of a response variable by integrating a large number of explanatory factors. MLR attempts to model the linear interaction between explanatory (independent) and response (dependent) factors

Table 13. Coefficients

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.032	.166		-.193	.847
	Enjoyment	.383	.084	.374	4.538	<.001
	Competence	-.077	.075	-.077	-1.022	.308
	PEOU	-.020	.079	-.014	-.250	.803
	PU	.196	.074	.132	2.638	.009
	Satisfaction	.557	.076	.540	7.334	<.001

a. Dependent Variable: Intention to adopt E-sports

Source: SPSS version 28.0

Table 14 shows the coefficient values for each variable, allowing you to assess their significance. Enjoyment, PU, and satisfaction factors in the table are significant predictors since their p-value is less than 0.05 whereas PEOU and competence are not. Enjoyment has the most effect

(beta=0.084), while PU the lowest (beta=0.074). The hypotheses utilized in this study will be examined depending on their P value, as shown in the table 14. This helps us to determine whether these hypotheses are supported. If the relevant P value is 0.05, the hypothesis is considered supported.

Table 14. Result of Regression

Hypothesis	Hypothesis statement	results
H1	Enjoyment directly and positively influences Continuance Intention to adopt E-sports.	Supported
H2	Competence directly and positively influences Continuance Intention to adopt E-sports.	Not supported
H3	H3: Perceived ease of use directly and positively influences Continuance Intention to adopt E-sports.	Not supported
H4	H4: Perceived usefulness directly and positively influences Continuance Intention to adopt E-sports	Supported
H5	H5: Satisfaction directly and positively influences Continuance Intention to adopt E-sports.	Supported

4. Discussion

The study's result shows that there is a positive association between enjoyment and continuance intention to adopt E-sports. Thus, H1 is supported. It is shown that enjoyment significantly affects continuance intention. This result is consistent with previous research (Teo & Noyes, 2011; Merikivi, Nguyen & Tuunainen, 2016; Hamari et al., 2020). This means enjoyment encourage adults to adopt E-sports applications since adults are highly interactive with each other and share their experiences.

The result of the study shows that there is a negative relationship between competence and continuance intention to adopt E-sports. Thus, H2 is not supported. Which contradict the latest studies (Ryan, Rigby & Przybylski, 2006; Oduor & Oinas-Kukkonen, 2017; Marcelino et al., 2021; Ryan & Deci, 2017). This means that gamers are not dependent on their competence towards continuance play or future play on E-sports.

The result of the study shows that there is a negative relationship between PEOU and continuance intention to adopt E-sports. Thus, H3 is not supported. Although the hypothesis was not supported, this result contradict the findings of previous studies (Humbani & Wiese, 2019; Suki et al., 2012; Linares et al., 2021; Lai & Chong, 2021). This means that players are not rely whether the program is easy or not to continue playing in E-sports and many people use E-sports gaming as an escape from problems in their daily life.

The result of the study shows that there is a positive relationship between PU and continuance intention to adopt E-sports. Thus, H4 is supported. Due to this, the results of the study are supported by the literature review (Wang, Ngai & Wei, 2012; Abbas & Hamdy, 2015; Li & Liu, 2014; Lin & Wang, 2012; Tang, Tang & Chiang, 2014; Chou, Min, Chang & Lin, 2009; Suki et al., 2012; Pantouw & Aruan, 2019), which has already established the perceived usefulness construct and found that it affects continuance intentions.

The result of the study shows that there is a positive relationship between satisfaction and continuance intention to adopt E-sports. Thus, H5 is supported. Due to this, the findings of this study confirmed that satisfaction significantly influence continuance intention. The findings also supported the hypothesized relationships of the proposed model, which are in perfect accordance with the prior research including (Chen, et al., 2009; Hadji & Degoulet, 2016; Joo et al., 2017, Chow & Shi, 2014).

5. Theoretical Implications

The study validates a theoretical model of the relationship between the factors (enjoyment, competence, perceived ease of use (PEOU), perceived usefulness (PU) and satisfaction) affecting continuance intention to adopt E-sports during the COVID-19 pandemic in Lebanon. This suggested behavioral framework aids in greater understanding, analyzing, then explaining consumer intention to adopt E-sports applications. This study supplied academics with a thorough knowledge of the prime motivating elements of E-sports continuance intention. As a result, the research serves as the foundation for further research into the variables affecting consumer continuance intention to adopt E-sports in Lebanon.

6. Research Recommendations

The results of the study revealed that the younger generation are closer to the technologies more than the older generation because they grew up in technological era. The game developers should take this factor into accounts because if a technology is useful enough, then they are more motivated to consume it. Even if they wanted to make complicated games, they should always add tutorial to the game and players still have the intention to play it.

Enjoyment is one of the most influential factors affecting the intention to play E-sports games. The results of the study help the game developers to invent more interactive games and tech like the Virtual Reality technology that will make the players more immersed. Information technology developers should bring people together in a virtual world while competing to be the best. Also, the findings of the study encourage developers to enhance e-sports to provide critical thinking for the children. It developers should really consider whether gaming activity is good enough habit to be adopted in their daily routine.

7. Limitations and Ideas for Future Research

Despite the study's strengths, there are several limitations that must be filled by other research in order to learn more about the subject. The geographic scope of this study, which only included Lebanese who play E-sports, is a limitation. Samples from other countries may be collected to look into this further. However, the sample size was deemed low for this study due to time constraints, in which the research addressed only 200 Lebanese players; in future research, it is advised to address a greater number of players. Lastly, the study was restricted to only five variables; it is advised to address a greater number of variables.

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