

## Investigating the Factors Influencing Students' Acceptance of Esports as a Career Choice

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**Abstract:** Esports is a digital entertainment and gained its popularity due to technological advancements, technology accessibility and elite competition. Esports is recognized as a formal industry and a form of occupation and led to higher career opportunities. In 2019, more than 11,000 job vacancies were advertised and are projected to reach more than 22,500 jobs in 2020. This study investigates the relationship between Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI) & Facilitating Conditions (FC), towards esports Career Choice Intention (CCI) among 365 private university students. The regression analysis shows that PE, EE, SI and FC have a significant impact on CCI. The independent variables indicate that the five factors significantly predict CCI -  $F(5, 359) = 40.562, p < 0.001$ . And the  $R^2$  result of 0.603 postulated that the model explains 60.3% of the variance in CCI. The research on esports as a career choice intention is few and limits the number of referencing. Possible future research on the key success factors of esports companies could illustrate the industry's career progression. Alternatively, industry players should look at the allocation of budgeting and resources, and its relationship with attitude towards esports.

**Keywords:** *Esports; Acceptance; Career Choice Intention; UTAUT; Expectancy.*

### 1. Introduction and Background

Esports as a sector of the economy and a type of career are starting to receive acceptance in most contemporary societies. Popular franchises like StarCraft and Counterstrike developed further to become some of the most notable esports in the history of the field, attracting record-breaking viewership of up to 50 million viewers overall (Olsen, 2015). More and more games are being released to become competitive. Currently, MOBA and FPS games are largely in control of the esports sector. Defense of the Ancient - Dota Annual's main tournament broke records for multimillion-dollar prize pools in single tournaments in 2017, with over 3000 events taking place (Elasri-Ejjaberi et al., 2020). The esports career seekers must fulfill the requirements within this industry such as higher levels of competitiveness, skill development, and social motives before they can become professional esports players. Thus, the younger players were more likely to seek career opportunities as professional esports players than older players with competitive gaming experience (Banyai et al., 2020). Many companies in South Korea are already developing their presence in this industry such as SK Telecom, Korea Telecom and Samsung by creating their teams and branding (Snavey, 2014). This could be due to the country having the required infrastructure, affordable gaming and internet options (Lokhman et al., 2018). Whilst in China, esports is integrated into the postgraduate or vocational curricula (Meng-Lewis et al., 2020).

The US is following this trend by enhancing and expanding its esports infrastructure (Lokhman et al., 2018). Therefore, it is not surprising that esports is considered a career option and is most popular among youth who represent the largest proportion of esports consumers (eNet, 2017). The reason for this popularity because of its similar motivational patterns to traditional sports such as intrinsic motivation, reward, professional athlete identity, respect and fame from the community and winning lucrative prizes (Rottensteiner et al., 2015; Clancy et al., 2016; Lochbaum et al., 2016). Banyai et al. (2020) postulated that esports require high levels of competition, skill development, and social motivations for career planning. It is imperative to identify the motive for career plans for players with competitive gaming such as socialization, skill development, and competition motives. These indicators determine the esports players' career choices and the companies support and finance them to be part of professional esports teams (Banyai et al., 2020). Around the world, Covid-19 has halted traditional sports and people resort to esports such as Riot's League of Legends - an esports version of the English Premier League (Heere, 2018). Other esports gradually adopted a similar framework to maintain their competition and popularity (Kim et al., 2020) and the results were outstanding - the LoL Worlds tournament received 44 million viewership in November 2019 (Kou & Gui, 2020).

Malaysia is still behind the rest of the world in terms of competitive gaming connectivity, infrastructure and full-time specialist (Hakim, 2019). Recently the government has recognized the potential of this multi-billion-dollar industry (Ministry of Youth and Sports Malaysia, 2019) but the subpar rewards deter Malaysians from becoming full-time esports athletes. According to Gomes (2020), more investors are investing within Asian regions that spur the growth of esports (Gomes, 2020). There is various academic literature on esports expanding into the fields of business, cognitive science, informatics, law, media studies, sociology, and sports sciences. However, there is no trend toward esports human resources, career management research within the context of the sub-fields of the esports literature. Thus, this study examined how the career choice intention in the esport industry among the Malaysian students at a private higher learning institution.

## 2. Literature Review

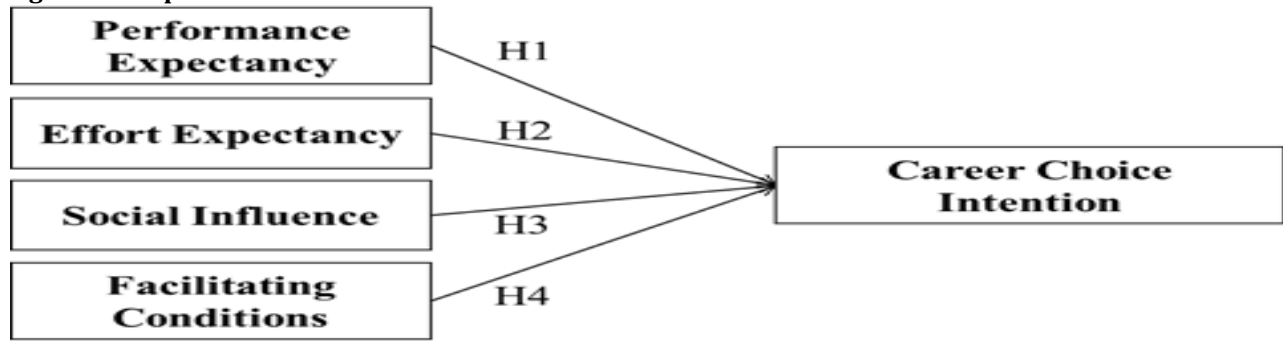
Esports is defined as a type of sporting activity used through the medium of electronic systems consisting of player or team-driven decision-making and outputs from a human-computer interface (Hamari & Sjöblom, 2017). It is a competitive video gaming industry managed by various leagues, businesses and sporting organizations (Newzoo, 2021). Numerous works have also underlined the involvement of governments in recognizing and regulating the emerging esports industry (Furrer, 2020). This study is adapting the Universal Theory of Acceptance and Use of Technology (Venkatesh et al., 2003) due to its relevance in addressing consumers' acceptance & use behavior of technology-related topics. According to Sabah (2016), behavioral intentions are defined as both a quantifier of how strong an individual's intent is on behaving a certain way as well as an indication of acceptance (Sabah, 2016). There was a significant relationship between behavior and usage loyalty (Kim & Kim, 2020). In this study, behavior intention is the intent or consideration given to esports as a potential mode of occupation by the UNITEN students. In this study, behavioral intentions are termed career choice intention (CCI) and it will be a representative of acceptance. Many studies defined Performance Expectancy (PE) as the degree to which one believes that using a specified system or platform will aid in their job performance (Oh et al., 2009) (Silic & Back, 2017). The study differs in that the researchers define performance expectancy closer to framing where it is the motivation of action or behavior of an individual based on the desirability or ability to realize an outcome (Venkatesh et al., 2003).

In this research context, PE is measured in the expected viability or mileage that can be gained out of esports as a career in Malaysia. Effort Expectancy is defined as the degree of ease that is associated with a specified entity or system under study (Attuquayefio et al., 2014). EE is contextualized as the level of convenience associated with esports as an occupation in direct comparison to existing conventional industries. EE has been proven in previous studies to affect the intentions of the use of technology (Hallmann & Giel, 2018; Silic & Back, 2017). Social Influence is the relationship established between an influencer & the influenced for a specific action (Peng et al., 2017). SI looks at how esports players perceive other influential parties in their lives view esports and how it affects their views & pressure toward esports. Subjective well-being has been postulated to be significantly influenced by achievement, friendship and social dimensions (Kim & Kim, 2020). These factors affect the players' intentions toward technology – esports in this context (Sabah, 2016). Facilitating conditions is defined as the level of perception to use organizational and technical infrastructure to support the use of new systems (Venkatesh et al., 2003). The perception of conditions that facilitate esports as an industry such as active advocacy, policymaking as well organizations related to esports (Todd & Bowers, 2014). A study postulated that the usage of blended learning was significant between FC and user behavior (Yeop et al., 2019). This means that facilitating conditions would logically affect players' use behavior, or in general, intention towards esports as a career choice.

## 3. Research Methodology

The study adapted the UTAUT model and incorporated four main constructs - Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Conditions and determines the influence of these constructs on the respondents' career choice options as an esports professional. Figure 1 depicts the framework of the study and four hypotheses were developed to uncover the career choice intention of the esports players.

Figure 1: Proposed Research Framework



*Adapted from Venkatesh, Morris, Davis and Davis (2003)*

Participants were active students of a private university in Malaysia, pursuing their education. The questionnaire was the chosen instrument of this study and the data were collected using Google Form online survey. This is to accommodate and ease the respondents' participation during the data collection. 375 respondents completed the survey. From the 4 variables, 26 related statements were used as the measurement items that were adapted from various sources (Rahi et al., 2019; Madigan et al., 2016; Venkatesh et al., 2003).

#### 4. Results

Table 1 depicts the demographic profile of the 375 participated respondents who are students of a private university in Malaysia.

Table 1: Demographic Profile

Variables		<i>f</i>	%
Gender	Male	248	67.9
	Female	117	32.1
Ethnic Group	Malay	252	69
	Chinese	35	9.6
	Indian	60	16.4
Origin	Others	18	4.9
	Local Students	364	99.7
	International Students	1	0.3
Education	Foundation	34	9.3
	Diploma	55	15.1
	Bachelor	266	72.9
Specialization	Others	10	2.7
	Engineering	136	37.3
	Energy Economics	78	21.4
	Information Technology	112	30.7
	Business Management	39	10.6

The majority of them were male – 67% and female respondents were about 32.1%. 69% are of Malay ethnic origin, 16.4% Indian and only 9.6% are Chinese. Almost all (99.7%) of the respondents are Malaysian. There are about 73% are pursuing their bachelor's degree programs, diploma students 15.1% and foundation students only 9.3%. Most of the respondents are specializing in Engineering (37.2%), followed by Information Technology ((30.7%). Whilst there are about 21% in the Energy Economics field. Only 10.6% are specializing in Business Management. The results of the reliability analysis show that the Cronbach's Alpha values of all the variables are between 0.824 and 0.893 as presented in Table 2. These outcomes fulfilled the reliability criteria of above 0.7 (Hair et al., 2018), thus, all the items are retained for further analysis.

**Table 2: Summary of Reliability Analysis**

Variables	Cronbach's Alpha
PE	0.824
EE	0.893
SI	0.885
FC	0.854
BI	0.882

The results of the correlation coefficient fall between, 0.41 to 0.70 (in Table 3) which indicates a moderate relationship between the constructs (Guildford, 1973).

**Table 3: Summary of Correlation Analysis**

		PE	EE	SI	FC	BI
<b>PE</b>	Pearson Correlation					
	Sig. (2-tailed)					
<b>EE</b>	Pearson Correlation	.480**				
	Sig. (2-tailed)	.000				
<b>SI</b>	Pearson Correlation	.663**	.467**			
	Sig. (2-tailed)	.000	.000			
<b>FC</b>	Pearson Correlation	.572**	.387**	.662**		
	Sig. (2-tailed)	.000	.000	.000		
<b>CCI</b>	Pearson Correlation	.605**	.458**	.704**	.687**	
	Sig. (2-tailed)	.000	.000	.000	.000	

**Table 4: Analysis of Variance (ANOVA)**

Model		Sum of Squares	DF	Mean Square	F	Sig
1	Regression	202.812	4	40.562	109.031	<.001 <sup>b</sup>
	Residual	133.558	359	.372		
	Total	336.370	364			

a. Dependent Variable: CCI  
b. Predictors: (Constant), SI, FC, EE, PE

The significant value of Analysis of Variance (ANOVA) depicted in Table 4 is 0.000, which is lesser than its significant level value of <0.001. The result demonstrates that the dependent variable Career Choice Intention towards esports has substantial effects on the independent variables – PE, EE, SI and FC. This indicates the significant level of dependent variable and independent variable models are well fit. Table 4 also shows that the independent variables significantly predict CCI with the score of F-ratio = 109.031, p<.001. Thus, concluded that PE, EE, FC and SI have a significant impact on CCI (Kim and Choi, 2019). Whilst, R<sup>2</sup> of 0.603 indicates that the model explains 60.3% of the variance in CCI as shown in Table 5.

**Table 5: Model Summary**

Model	R-square	Adj. Square	R	Sig. F change	Std. Error of the Estimate
1	0.603	0.597		< 0.001	0.60994

Predictors: (Constant), SI, FC, EE, PE

Table 6 summarizes the findings of the study. All hypotheses are accepted because all the constructs - Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Factors - have significant relationships with Career Choice Intention.

**Table 6: Summary of Analysis**

Hypotheses	Relationships	B	t	p-value	Finding
H <sub>1</sub>	PE→CCI	.157	2.299	.022	Accepted
H <sub>2</sub>	EE→CCI	.121	2.662	.008	Accepted
H <sub>3</sub>	SI→CCI	.435	7.426	<.001	Accepted
H <sub>4</sub>	FC→CCI	.353	7.129	<.001	Accepted

**Discussion**

The study confirmed that PE, EE, FC and SI have a significant impact on CCI, which supports the study by Kim and Choi (2019). This means that students would consider esports as a new opening for career opportunities provided that the gain in Performance Expectancy meets the criteria of a viable career in the esports industry. The findings confirmed that Performance Expectancy influences the adoption and career choice intention (Silic & Back, 2017). Meaning that those who wish to pursue a career in esports have to have the knowledge, skills and ability in using the specified system or platform to guide and assist them in the performance of their work. Similarly, Effort Expectancy also influences career choice intention due to its convenience and flexibility, as well as the on-the-job entertainment factors that affect the intentions (Hallmann & Giel, 2018; Silic & Back, 2017). The younger generations may prefer this career option since it combines work and entertainment and may not require a physical office presence. Of course, Facilitating Conditions are imperative and must be relevant and suitable to meet their expectations.

Meanwhile, Social Influences such as friends and family were major influential factors in their career choice intention in the esports industry. It is common knowledge that the esports industry offers a multitude of employment and profit opportunities (Karadakis and Painchad, 2022). The lucrative monetary gained as an esports player prompts the younger generation to delve into this career option. These findings could provide necessary insights for governments and industry players to consider the esports industry as a real industry. This would escalate the creation of infrastructure and facilities for esports. Thus, highlight the required improvement on existing policies relating to the esports industry. Furthermore, the outcomes of this study provide insights for the esports organizations or potential investors about the Malaysia esports market and opportunities. This would prompt them to take part in business investments in starting or advocating the local esports industry.

**5. Managerial Implications and Recommendations**

The respondents were undergraduate students in one university, thus the findings should not be generalized. Other settings could reflect different outcomes. This study could be extended by distinguishing the preference towards PC-based esports and Mobile based esports. The relationship between resource allocation and attitude towards esports could also be investigated to confirm the public preferences in choosing a career in this industry. Although esports careers differ from traditional sport, it requires similar skills such as professionalism, work ethic, communication, critical thinking, problem-solving, teamwork, leadership, career management, and intercultural fluency. For those who wish to take up and have a sustainable career in esports, they have to acquire advanced knowledge, lifelong learning skills, passion and desire.

**Conclusion**

This study established the basis of university students' career choice intention in the esports industry. It is postulated that Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Conditions have a positive significant influence on esports Career Choice Intention among university students. The rapid technological development and popularity of the industry would escalate the attractiveness of building a career out of esports.

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