THE RELATIONSHIP BETWEEN MOTIVATION AND SATISFACTION AMONG E-SPORTS ATHLETES IN THE PUBLIC UNIVERSITIES

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ABSTRACT

Studies on e-sports (e-sports) involvement factors are still lacking in the Malaysian context. Accordingly, the objective of this study was to examine the relationship between motivation and satisfaction among e-sports athletes at Melaka Public universities. The study respondents consisted of 150 e-sports athletes, who participated in e-sports tournaments, from public universities in Melaka. Data were distributed to respondents who were involved in e-sports held from 2020 to 2022. Descriptive analysis and Pearson correlation were used to study the relationship between motivation and satisfaction among e-sports athletes at public universities in Malacca. Based on the findings, the descriptive analysis of Entertainment Motivation (MH) among E-sports Athletes scored the highest mean value with a mean score of 4.0. Meanwhile, the descriptive analysis of Diversion Motivation (ML) among E-sports Athletes showed medium and low values in contrast to other factors, the mean score =3. As a result of the research findings, there is a motivational influence of competition, diversion, entertainment, fantasy, social, and complements on satisfaction among e-sports athletes of public universities in Melaka. There are many advantages that can be seen in the development of this electronic sport such as in terms of careers and government involvement regarding Industrial Revolution 4.0.

Keywords: *motivation, electronic sport, satisfaction, public universities*

1.0 INTRODUCTION

Electronic sport has become a form of entertainment activity worldwide. The use of Electronic sport has increased due to the development of the Internet and information technology (IT), which has also fuelled the popularity of interactive digital media. As a result, more and more e-sports games are being covered by media channels, and potential investors are paying more attention to this niche market as a growing sponsorship opportunity. A study by Faust et al. (2013) and Griffiths (2017) explain that e-sports constitute a new industry for video game development as well as economic development. Haider Seth Schneider (2021), Electronic sport product manager at NVIDIA Corporation, GeForce gaming division, speaking as a member of the Consumer Technology Society (CES) at the sporting event CES 2021, stated that Electronic sport has gained popularity just like traditional sports and other major sports players. According to Reyes (2019),

the number of Electronic sport viewers is expected to increase from 454 million in 2019 to 646 million in 2023 (Business Insider, 2019). As a result, we could see a compound annual growth rate (CAGR) of 9% from 2019 to 2023. Electronic sport viewership growing at double the rate in six years represents an increase of 335 million viewers. Furthermore, David (2018) stated that Electronic sport competitions were introduced in the 30th SEA Games in 2019 (The Manila Times, 2018). Six gold medals were awarded to three gaming media, two for computers, two for mobile devices and two for consoles. Malaysia does not pass up the chance to take part in competitions featuring e-sports. Electronic sport has become one of the professional fields and some minorities have turned gaming into a career. According to Lu (2017), Electronic sport is a competition that requires skill, skills, strategy, tactical planning, concentration, communication between players, solidarity of team members. group and in-depth training. There are many different motivations and desires that can be related to individual satisfaction in achieving desires. The motivational factor is one of the key factors that attract and encourage different types of individuals to be drawn to the world of e-sports. Fuster et al. al (2014) identified four motivational factors as exploration, socialization, achievement, and separation. Later, Kahn (2015) identified six types of player motivation, which are social relationships (socializers), importance of game exploration (completionists), competition (competition), the importance of reducing tension (escape), the importance of characters' behavior according to the story) (*story driven*) and mental toughness (ego).

1.1 THE STUDY OBJECTIVE

The objective of this study is generally to study the relationship between motivation and satisfaction among the e-sports athletes of the public universities in Malacca.

2.0 LITERATURE REVIEW

Theoretical framework includes the formulation of concepts, models and theories that underpin the research carried out. The researchers selected a sports video game motivation scale (Cianfrone et al., 2011), a Trojan player typology (Khan et al., 2015), a game customer satisfaction survey (Yoshida et al., 2010) and The Game User Experience Satisfaction Scale (GUESS) (Phan, M. H., Keebler, J. R., dan Chaparro, B. S., 2016 as a basic research model on the formation of motivational and satisfaction relationships for the satisfaction of UTeM e-sports athletes. However, the model does not explain the motivational factors of e-sports athletes that indirectly contribute to a person's satisfaction factor, especially in students who are pursuing the goal of participating in e-sports.

2.1 Motivation and Satisfaction: Theoretical framework

This study is motivated and shaped by the following frameworks.

2.1.1 Model Sport Video Game Motivation

The Sports Video Game Motivation Scale model was studied by Cianfrone et al. (2011). Researchers classify relevant motivational factors to study the origins of a person's desire to continue playing e-sports. This study analyses the eight basic motivations involved in attracting someone to participate in e-sports, which are *competition, diversion, entertainment, fantasy, interest in sport, knowledge application, social interest, and team identification*. This factor is explained in the context of socialization and the psychological needs of the players. The Sports Video Game Motivation Model is based on research conducted by Kim and Ross (2006). They were among the first to study sports video game (SVG) samples and develop measurement scales.

They applied the Uses and Gratifications (U and G) approach (Katz et al., 1974). Kim and Ross described that this U&G approach considers the psychological needs met through sports video games and creates motivational scales that reflect unique aspects of the experience of using the media.

This model is based on the approach put forth by Katz (1974) of success, joy, and social interaction. This theory describes an understanding of the motives for consuming media (Ruggiero, 2000) such as reading newspapers or listening to the radio (Wimmer Dominick, 1994), computers, and video games (Funk Buchman, 1996). A theory of communication called uses and gratifications theory focuses on how people actively use media to satisfy their desires and emotions. According to this perspective, people actively select, consume, and interpret media messages based on their own needs, motivations, and desires rather than being passive consumers of media. According to this hypothesis, people seek out certain media content because it achieves certain goals or satisfies certain psychological, social, or emotional needs.

2.1.2 Trojan Player Typology

Kahn and colleagues (2015) developed a gaming motivation scale, called Trojan Player Typology, that assesses the degree to which players are Socializers, Completionists, Competitors, Escapists, Story-driven, dan Smarty-pants (e.g., intellectually motivated). A feature of the Trojan typeface is that each player can represent any element. For example, players may play to build and maintain social relationships and complete everything the game has to offer but have no desire to participate in competitive, escapist tournaments, experience stories or to improve your intelligence.

The development of a Trojan player typology involved 17 video game researchers reviewing previous literature (Bartle, 1996; Klug and Schell, 2006; Sherry et al., 2006; Yee, 2006; Jansz and Tanis, 2007; Hainey et al., 2011 ;) and generate factors related to game dynamics (Kahn et al., 2015). The scale was evaluated on a pilot sample of 381 people using exploratory factor analysis and abbreviated parsimony (Kahn et al., 2015). The scale was then validated on two game types (i.e., League of Legends is a multiplayer online battle arena game, Romance Knights 3 is a multiplayer online game) and two platforms culture (i.e. North America and China). The acceptance model is applicable to both cases (Kahn et al., 2015).

2.1.3 Games Customers Satisfaction Survey

Oliver (2010) and Dwaikat et al. (2019) described customer satisfaction as a satisfied consumer response. It is judged that the features of a product or service or the product service itself provide (or provide) a degree of satisfaction associated with use, including more or less satisfaction. According to Oliver 2010, satisfaction occurs when you exceed customer expectations, while poor performance will lead to dissatisfaction. Cronin and Taylor (1992) believe that customer satisfaction should be the primary goal of most businesses, especially those providing intangible and heterogeneous asset management services. Customer satisfaction is an important factor in business strategy as is customer loyalty and likelihood of product repurchase.

Yoshida and James (2010) defined customer satisfaction in this study as a satisfactory response to sports entertainment activities and ancillary services provided in gaming process. Service satisfaction is defined as a customer's overall satisfaction with the service experienced during a sporting event. Game satisfaction refers to a customer's overall satisfaction with the gaming experience associated with on-field athletic competition.

2.1.4 The Game User Experience Satisfaction Scale (Guess

In their review of game satisfaction measurement tools, Phan and colleagues (2016) identified several limitations. First, many existing gaming satisfaction scales only measure a single

satisfaction attribute (Phan et al., 2016). Second, existing measurement studies have focused on specific types of games (Phan et al., 2016). Third, the scale does not take into account other important aspects of game satisfaction, such as usability and social interaction (Phan et al., 2016). Fourth, many measurement tools are developed to support research and are not up to the task of game evaluation (Phan et al., 2016). Fifth, many items in the scale are unclear (Phan et al., 2016). Sixth, the game satisfaction scale was not developed and validated using rigorous methods, such as using literature reviews, expert surveys, pilot samples, factor analysis, Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to develop and validate the scale (Phan et al., 2016).

According to Phan et al. (2016), there is a need for a comprehensive, psychometrically validated game scale suitable for testing and evaluating games., a new game scale called the Experience Satisfaction Scale Game user experience (GUESS) has been developed based on rigorous development of the scale. and a validation system to meet this requirement. Resources (e.g., existing game scales and heuristics) on the enjoyment and satisfaction of playing video games were pooled to create an initial set of items for the scale. The results of the study will then undergo several iterative stages of revision and refinement before and after the expertise and pilot testing stages. Once refined, the scale was administered to two large independent samples of over 600 video game players who rated over 450 unique videos across several popular genres (e.g., role-playing, adventure act). Exploratory factor analysis and confirmatory factor analysis were performed on the data to explore underlying factors and further validate the scale (Phan et al., 2016).

3.0 METHODOLOGY

This quantitative study on e-sports sought to explain the relationship between athlete motivation and satisfaction on e-sports in Malacca public universities. This study used relational design via a survey. This study relied on a poll of public universities video game enthusiasts with superior knowledge and expertise.

This study began with the researcher seeking approval from the universities administrative unit to survey e-sports athletes. This study took 4 weeks which included 150 Melaka State public universities e-sports athletes who competed in Malaysian open and closed events. The questionnaire required respondents to complete three objective parts of motivation and e-sports satisfaction. The closed questionnaire was used for this investigation. The questions were adapted from peer-reviewed research tools with some modifications to make them applicable to this situation.

Most questions were Likert-style, whereas some were short-answer. Likert scale responses were used to establish (1 = Strongly disagree) and (5 = Strongly agree). The questionnaire comprised two-parts. First, descriptive characteristics that categorized the respondent group. Objective analysis was composed into three parts: motivational factors (Cianfrone et al., 2011) and Trojan Player Classification (Khan et al., 2011). 2015), satisfaction (Game Customer Satisfaction Survey Yoshida et al., 2010), and GUESS (Phan, M. H., Keebler, J. R., and Chaparro, B. S., 2016).

SPSS version 24.0 was used to analyze data. Data were analysed by using descriptive statistics. Pearson correlation equation was also conducted. According to Turney (2023), the Pearson correlation coefficient (r) is the most widely used technique for evaluating the resistance of linear connections. The coefficient of determination indicates the degree and direction of the relationship between two variables and is between -1 and 1(Schober and Schwarte, 2018).

4.0 RESULTS AND DISCUSSIONS

The results were based on the hypotheses of the study as follows.

4.1.1 Hypotheses 1: There is a relationship between competition motivation and satisfaction among e-sports athletes from public universities in Melaka.

Table 1: Mean Score Distribution for the MP Factor

No Item	Item	Min	Standard deviation
1	Mp_12_1	3.65	1.26
2	Mp_13_2	4.05	1.08
3	Mp_14_3	4.14	0.97

The Table 1above shows the mean score distribution for the MP factor. Overall (N= 120), the findings showed that 2 items were at a level with the mean score was between 3.67 to 5.00. whereas as many as 1 item was at a medium level with a mean value between 3.65.

4.2 Hypotheses 2: There is a relationship between diversion motivation and satisfaction among e-sports athletes from public universities in Melaka.

Table 2: Mean Score Distribution for the ML Factor

No Item	Item	Min	Standard deviation
1	ML_15_1	3.80	1.08
2	ML_16_2	3.50	1.17
3	ML_17_3	2.72	1.36

Table 2 shows the mean score distribution for the ML factor. Overall (N= 120), the findings showed that 1 item was at a high level, with a mean score was between 3.67 to 5.00. whereas as many as 2 items were at a moderate level with a mean value between 2.34 - 3.66.

4.3 Hypotheses 3: There is a relationship between entertainment motivation and satisfaction among e-sports athletes from public universities in Melaka.

Table 3: Mean Score Distribution for the MH Factor

No Item	Item	Min	Standard deviation
1	MH_18_1	4.49	0.72
2	MH_19_2	4.08	1.08
3	MH_20_3	4.20	0.84

Table 3 shows the mean score distribution for the MH factor. Overall (N= 120), the findings showed that all three items were at a high level, with a mean score between 3.67 to 5.00.

4.4 Hypotheses 4: There is a relationship between fantasy motivation and satisfaction among e-sports athletes from public universities in Melaka.

Table 4: Mean Score Distribution for the MK Factor

No Item	Item	Min	Standard deviation
1	MK_21_1	4.01	0.97
2	MK_22_2	4.02	1.08
3	MK_23_3	3.92	1.03

Table 4 shows the mean score distribution for the MK factor. Overall (N= 120), the findings showed that all three items were at a high level, with a mean score between 3.67 to 5.00.

4.5 Hypotheses 5: There is a relationship between social motivation and satisfaction among e-sports athletes from public universities in Melaka.

Table 5: Mean Score Distribution for the MS Factor

No Item	Item	Min	Standard deviation
1	MS_24_1	3.95	.98
2	MK_24_2	3.75	1.11
3	MK_24_3	3.80	1.07

Table 5 shows the mean score distribution for the MS factor. Overall (N= 120), the findings showed that all three items were at a high level, with a mean score between 3.67 to 5.00.

4.6 Hypotheses 6: There is a relationship between Completionists motivation and satisfaction among e-sports athletes from public universities in Melaka.

Table 6: Mean Score Distribution for the MPL Factor

No Item	Item	Min	Standard deviation
1	MPL_27_1	4.09	0.86
2	MPL_28_2	4.15	0.85
3	MPL_29_3	4.23	0.82

Table 6 shows the mean score distribution for the MPL factor. Overall (N= 120), the findings show that all three items were at a high level, with a mean score between 3.67 to 5.00.

Table 7: Pearson Correlation Analysis of the Relationship Between Satisfaction with Factors - Motivational Factors

		MP	ML	MH	MK	MS	MPL
SATISFACTION	Pearson Correlation	.640**	.549**	.549**	.562**	.659**	.540**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000
	N	120	120	120	120	120	120

Table 7 shows the relationship between satisfaction and motivation. Based on the Pearson correlation analysis performed for the pair of satisfaction and MP variables, the results showed that there was a strong correlation between 0.601 and 0.800 with the Pearson correlation value (r=0.640: P = <0.05) with significance level (p) = 0.000. Hence, satisfaction and MP had a positive correlation of 0.640 with a variance value of the variable of 41%. This shows, basically, that the driving factor behind the e-sports players is a sense of competition. This can be seen by how they take part in a tournament or LAN, winning a championship or the challenge posed by a particular game. It is a feeling or vocation that players need to be creative in order to finish winning the competition challenge. Sherry and colleagues (2006) described this aspect as a process in which players challenge themselves to a higher level of skill or personal achievement. According to Uysal and Yildirim (2016), players tend to play games that offer optimum level of challenge as they can meet their needs to feel efficient. Thus, the hypothesis was accepted.

For the pair of satisfaction and ML variables, the results showed a moderate correlation between 0.401 and 0.600 with the Pearson correlation value (r=0.549: P = <0.05) with significance level (p) = 0.000. Hence, satisfaction and ML variables had a positive correlation of 0.549 with a variance value of 30%. We can interpret that players love the chance to have the ability to distract themselves and escape from the little problems of their lives and go to a completely different dimension where they have all the power and do as they like (Ghoura, 2018). One of the main reasons for this rapid relief is because gaming activity will inject a hormone known as endorphins into the brain, a chemical that is associated with excitement and decreasing discomfort. (Angela, 2011 dan Kizzanna Brown, 2020). The results indicate that there is an influence of the motivation of the wrestling on the impact of athlete satisfaction. Therefore, the hypothesis was accepted.

For couple satisfaction and MH variables, the results showed a moderate correlation between 0.401 and 0.600 with a Pearson correlation value (r=0.549: P = <0.05) with significance level (p) = 0.000. This proves that the satisfaction variable and the MH variable have a positive correlation of 0.549 with a variance value of the variable of 30%. This is because the entertainment that e-sports games provide causes the athletes to continue to play. Partly based on Tamborini et al. (2010)'s statement about the role of competence, autonomy, and correlation in predicting the pleasant experience of a game, our data identifies the need for extra needs that serve as important predictors of the experience of reward. (Beth, 2015). Individuals want to relax and have fun wherever they are, and mobile games offer that opportunity (Micic, 2019). Hence the hypothesis is accepted.

For couple satisfaction and MK variables, the results showed a moderate correlation between 0.401 and 0.600 with a Pearson correlation value (r=0.562: P = <0.05) and significance level (p) = 0.000. This proves that the satisfaction variable and the MK variable have a positive correlation of 0.562 with a variance value of the variable of 32%. The main goal is to create an atmosphere that emotionally captures and attracts players and makes them feel like part of the exciting virtual world. According to Park and Hwang (2009), this is a subjective experience in which an individual feels as if he is in the virtual world and forgets the real world around him. Therefore, the hypothesis is accepted.

For the pair of satisfaction and MS variables, the results show a strong correlation between 0.601 and 0.800 with the Pearson correlation value (r=0.659: P = <0.05) and significance level (p) = 0.000. This proves that the satisfaction variable and the MS variable have a positive correlation of 0.659 with a variance value of the variable of 43%. Besides, the game concept itself

is interactive and competitive, triggering virtual social interaction and bringing excitement to the player (Martoncik 2018). The game also has a communication space, where players engaged in relationships can communicate and develop specific strategies. This situation indirectly contributes to building social ties with other players around the world (Fredrickson 2001). Consequently, the hypothesis is accepted.

Finally, for the pair of variables satisfaction level and MPL, the results show a moderate correlation between 0.401 and 0.600 with the Pearson correlation value (r=0.540: P = <0.05) and significance level (p) = 0.000. This proves that the satisfaction level variable and MPL have a positive correlation of 0.540 with a variance value of the variable of 29%. They look at every aspect of the game and try whatever the virtual game developer has to offer. Players may be motivated to explore everything the game offers, regardless of whether they are satisfied or not (Cruz et al., 2017). Participants who identify themselves as perfectionists express a desire not only to complete the game, but to complete all the tasks included in the game itself. The term refers to a pattern of behaviors commonly found in the online gaming community associated with metagame incentives (Dixon, 2013) which describes a player who pursues achievement with persistent determination. This type of player appreciates the reward system and realizes that it is not their driving force for involvement in the game, even though they are not so interested in the games themselves. Therefore, the hypothesis was accepted.

5.0 CONCLUSION

A study on e-sports athletes' motivation and happiness at Melaka public universities is needed to determine how motivation indirectly affects student contentment. Motivation and satisfaction studies are limited. While studies on the Malaysian environment are still underway, public exposure is crucial to the growth of e-sports, especially among athletes. E-sports athletes' pleasure is studied using six motivating traits: competitive, entertaining, enjoyable, imaginative, social, and complimentary. The study examines e-sports motivation and satisfaction at Malacca public universities. This survey included 120 competitive e-sports college students. Motivation is the main reason gamers play e-sports. A complete e-sports framework should support fair competition, player health and safety, and sustainable economic growth. It also ensures players have resources to support their well-being and industry success. This study has various benefits, including career advancement, government involvement in the industrial revolution 4.0, and social exposure. Researchers and athletes can use this study to demonstrate to students the time and effort-saving benefits of participating in sports. The relationship between the motivation and satisfaction of e-sports players Melaka's public colleges ought to back the concept, assist athletes in developing, and let them take part in the e-sports revolution 4.0 in Malaysia. Therefore, the correlation between motivation and satisfaction at the public universities of Malacca is the reason behind the positive and targeted implications of e-sports games on respondents.

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