

The Effects of e-Sports referees Authenticity on Viewing Commitment, Viewing Attitude, and Re-viewing Intention

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Abstract

The purpose of this study is to investigate whether the authenticity of the referees perceived by esports viewers affects the intention to re-viewing intention through viewing commitment and viewing attitude. To achieve the purpose of this study, a survey was conducted on 200 viewers who had watched esports LCK broadcasts. A total of 200 data were collected, and all data were used as the final valid sample. For data processing, frequency analysis, Cronbach's alpha, correlation analysis, and regression analysis were performed using SPSS 27. The results shown in this study are as follows. First, it was found that the authenticity of the referees had a positive effect on viewing commitment. Second, it was found that the authenticity of the referees had a positive effect on viewing attitude, Third, it was found that the authenticity of the referees had a positive effect on re-viewing intention. Fourth, it was found that viewing commitment had a positive effect on the re-viewing intention. Fifth, it was found that the viewing attitude had a positive effect on the re-viewing intention. We found from these results that viewers are importantly aware of the authenticity of e-sports referees and therefore have to strive to increase the authenticity of referees.

Keywords: *e-Sports, Referee, Authenticity, Negative Emotion, Viewing Commitment, Viewing Attitude, Re-viewing Intention.*

1. Introduction

In the modern world, e-sports is growing rapidly and has established itself as a culture that is gaining huge popularity, away from simple games or play in the past. Internationally, it was adopted as a demonstration event at the 2018 Asian Games in Palembang. And as it was adopted as the first official event at the 2022 Hangzhou Asian Games, interest in the e-sports industry is increasing. The most famous League of Legends Champions Korea(LCK) e-sports league in Korea is directly operated by various companies such as S, K, and H, and supports the LCK league through sponsorship. In addition, the IOC announced that the first e-sports Olympics will be held in Saudi Arabia in 2025. Through this, it can be seen that e-sports has the same sports industry competitiveness as the domestic professional sports league [1].

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In this environment, various issues are constantly arising due to problems related to e-sports referees in various popular e-sports competitions. Various problems such as immediate response by referees or errors in conveying situations, reversal of judgment, and delay in matches have occurred, drawing criticism from e-sports fans and viewers. Modern people are tired of fake and false advertisements, and they no longer accept brand products or services that are packaged as they are [2]. Domestic e-sports have suffered from match fixing in the past, and the desire for authenticity is increasing as fans have interested and liked it through the authenticity of many stakeholders. Therefore, it can be said that the sincere appearance of referees is also a very important part of e-sports.

Authenticity is a word derived from Greek philosophy and refers to a state in which there is no gap between the inner self that I naturally feel and the outer self that I show to others [3]. Another definition means the unity of the inner state and behavior, unlike pretence, falsehood, and fake [4]. From a business or corporate point of view, authenticity is the belief that a company will faithfully carry out the promises it made with various stakeholders and the promises they expect in business interactions, and authenticity from a consumer point of view means that it meets the consumer's expectations and satisfies the consumer's needs in the interaction between stakeholders and a company's products, brands, or services [5,6]. Authenticity was mainly an area of inquiry in the fields of philosophy and psychology, but recently it has been discussed in various fields such as companies, advertisements, and the relationship between products and consumers [7]. It can be seen that e-sports judges also need such authenticity.

Looking at previous studies related to this authenticity, it can be seen that the authenticity perceived by viewers affects the flow, attitude, and intention to reuse of viewers and consumers [8]. Therefore, this study aims to investigate the effect of e-sports referee on e-sports viewers' viewing commitment, viewing attitude, and re-watch intention. It is expected that the results of this study can be used as a basic basis for establishing a referee operation and management system in running e-sports competitions and leagues in the future.

2. Research Hypothesis

2.1 Relationship between Authenticity, Viewing Commitment and Viewing Attitude

The authenticity of e-sports referees perceived by e-sports viewers when watching e-sports broadcasts can play an important role in immersing viewing. Looking at previous studies related to this, first, previous studies related to the leadership of golf leaders showed that the authenticity of the leader had a positive effect on the player's commitment [9]. And in a study of Kick A Goal's viewers, the authenticity felt by viewers had a positive effect on viewing commitment [8]. Previous studies on consumers of brands said that authenticity positive effect on brand attitudes, and brand attitudes formed through authenticity positively affect purchase intentions [10]. And previous studies related to the authenticity of YouTubers showed that authenticity had a positive effect on viewers' continuous viewing intention [11]. Through the preceding studies above, it can be inferred that the authenticity of e-sports referees can positively affect viewing commitment, viewing attitude, and re-watching intention. Therefore, the following hypothesis was established.

Hypothesis 1. The authenticity of the e-sports referees will have a positive effect on viewing commitment.

Hypothesis 2. The authenticity of the e-sports referees will have a positive effect on viewing Attitude.

Hypothesis 3. The authenticity of the e-sports referees will have a positive effect on reviewing intention.

2.2 Relationship between Viewing Commitment, Viewing Attitude, Reviewing Intention

Looking at previous studies related to the relationship between viewing commitment, viewing attitude, and re-audit intention, it can be seen that viewing commitment has a positive effect on re-viewing intention [12]. And viewing attitude also appears to have a positive effect on re-viewing intention [13, 14]. Therefore, the following hypothesis was established regarding the relationship between viewing commitment, viewing attitude, and re-viewing intention.

Hypothesis 4. The viewing flow will have a positive effect on re-viewing intention.

Hypothesis 5. The viewing attitude will have a positive effect on re-viewing intention.

3. Research Method

3.1 Research Subjects

The subjects of this study are viewers of e-sports games. The survey was conducted on 200 viewers who watched e-sports games in 2023 more than two to three times. The sampling method used an online Google questionnaire, and after reading the contents that could fully understand the purpose and contents of the questionnaire, they agreed to the survey and responded to the questionnaire. All data of a total of 200 people were selected as the final valid sample. The general characteristics of the subjects of this study are shown in Table 1.

Table 1. Characteristics of subjects

	Division	Frequency(person)	%
Gender	Male	117	58.5
	Female	83	41.5
	Sum	200	100
Age	10	49	13.7
	20	123	76.1
	30 over	28	10.2
	Sum	200	100
Occupation	Student	49	24.5
	University student	84	42.0
	Office worker	46	23.0
	Self employed	3	1.5
	Not employed	13	6.5

Others	5	2.5
Sum	200	100

3.2 Research Tools & Reliability Analysis

The survey tool used in this study used a questionnaire. The questionnaire was composed by revising and supplementing the questionnaire used in previous studies by concept to suit the purpose of this study. All items except demographic characteristics consisted of a 7-point Likert scale. Details on the composition of the questionnaire are shown in Table 2 below.

An internal consistency test was conducted to analyze the reliability of the questionnaire used in this study. The reliability analysis used the Cronbach's α test, where .7 or higher is sufficient [15]. Therefore, as shown in Table 2, all factors have values of .7 or higher, and each factor has internal consistency. Specific reliability analysis results are shown in Table 2.

Table 2. Composition of survey tools

Factors	Items	Cronbach's α
Authenticity	5	0.881
Viewing commitment	5	0.840
Viewing attitude	4	0.993
Re-viewing Intention	4	0.885

3.3 Data Processing Method

SPSS 27 was used for data processing to achieve the purpose of this study. Frequency analysis was performed to understand the general characteristics of the survey subjects and the general propensity of the sample, and internal consistency reliability test of each concept was performed through Cronbach's α . Correlation analysis was conducted to determine the discriminant validity of the scale and the degree of correlation between each variable. And regression analysis was conducted to verify the research hypothesis established in this study.

4. Results

4.1 Correlation Analysis

Correlation analysis was conducted to verify the discriminant validity. The results are shown in Table 3. The discriminant validity can be said to have a discriminant validity if the correlation coefficient between each construct is not 1 in the 95% confidence interval [16]. And if the null hypothesis of correlation coefficient 1 is rejected, there is a discriminatory validity between each factor [17]. Therefore, the measures used in this study

can be considered discriminative.

Table 3. Correlation analysis

Factors	1	2	3	4
Authenticity	1			
Viewing commitment	0.562**	1		
Viewing attitude	0.823**	0.452**	1	
Re-viewing intention	0.786**	0.510**	0.820**	1

** $p < .01$

4.2 Hypothesis Verification Results

Table 4 shows the results of examining the relationship between the authenticity of e-sports referees and viewing commitment. Specifically, it was found that authenticity ($\beta=0.562$, $p < 0.001$) had a statistically positive effect on viewing commitment, and 6% of the change in viewing commitment was explained.

Table 4. Effect of authenticity on viewing commitment

Factors	b	β	t
Authenticity	0.750	0.562	9.499**
F		9.0232***	
R ²		0.316	

*** $p < 0.001$

Table 5 shows the results of examining the relationship between the authenticity of e-sports referees and viewing attitude. Specifically, it was found that authenticity ($\beta=0.823$, $p < 0.001$) had a statistically positive effect on viewing commitment, and 67.6% of the change in viewing attitude was explained.

Table 5. Effect of authenticity on viewing attitude

Factors	b	β	t
Authenticity	0.792	0.823	20.233***
F		9.0232***	
R ²		0.676	

*** $p < 0.001$

Table 6 shows the results of examining the relationship between the authenticity of e-sports referees and re-viewing intention. Specifically, it was found that authenticity ($\beta=0.786$, $p<0.001$) had a statistically positive effect on viewing commitment, and 61.8% of the change in re-viewing intention was explained.

Table 6. Effect of authenticity on re-viewing intention

Factors	<i>b</i>	β	<i>t</i>
Authenticity	0.890	0.786	17.747***
F		314.952***	
R ²		0.618	

*** $p<0.001$

Table 7 shows the results of examining the relationship between viewing commitment and re-viewing intention. Specifically, it was found that authenticity ($\beta=0.510$, $p<0.001$) had a statistically positive effect on viewing commitment, and 26% of the change in re-viewing intention was explained.

Table 7. Effect of viewing commitment on re-viewing intention

Factors	<i>b</i>	β	<i>t</i>
Viewing commitment	0.433	0.510	8.277***
F		68.511***	
R ²		0.260	

*** $p<0.001$

Table 8 shows the results of examining the relationship between viewing attitude and re-viewing intention. Specifically, it was found that authenticity ($\beta=0.820$, $p<0.001$) had a statistically positive effect on viewing commitment, and 67.3% of the change in re-viewing intention was explained.

Table 8. Effect of viewing attitude on re-viewing intention

Factors	<i>b</i>	β	<i>t</i>
Viewing attitude	0.965	0.820	20.031***
F		401.241***	
R ²		0.673	

*** $p<0.001$

5. Conclusion

We found that the authenticity of referees perceived by e-sports viewers had a positive effect on viewing commitment, viewing attitude, and re-viewing intention, and that viewing commitment and viewing attitude formed through the authenticity of referees had a positive effect on re-viewing intention. These results show that the authenticity of the referee that viewers feel when they watch the broadcast of the esports competition plays an important role in the viewers. Unlike general sports, e-sports has relatively few referees' intervention or decisions that determine the victory or defeat of the game. However, so far, there have been many situations in which problems have occurred due to several referee decisions or insufficient responses. In other words, it can be seen that the referee is very important even in esports games.

Therefore, associations and organizations that run esports competitions or leagues should have a thorough refereeing education system and make efforts to enhance the authenticity of referees. In other words, there should be educational programs such as systematic referee training, rules, and regulations, and programs that can evaluate the character and qualities of referees. If these education and programs increase the authenticity of esports referees, the audience's viewing commitment and viewing attitude will be positively formed, and ultimately the number of fans who continue to watch e-sports broadcasts will increase.

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