

# The Relationship between E-Sports Viewing Motives and Satisfaction: The Case of League of Legends

Sang Woo Lee, Jae Woong An, and Ji Young Lee

**Abstract**—E-Sports, short for Electronic Sports, means ‘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’. With the introduction of e-Sports, games have emerged as the new public culture. Also, it has had positive effects on related industries including game, contents, broadcasting, IT and more. Studies on e-Sports consumers and consumer behavior are required for the continuous vitalization of the e-Sports industry, however, there are insufficient studies on the psychological aspect of e-Sports consumers. This study aims to find the motives for watching the League of Legends (LoL), which has opened a new paradigm of e-Sports since Star Craft 1 and 2, and also find the relationship between such viewing motives and viewing satisfaction. The results of this study are expected to be the base of future in-depth studies on e-Sports consumer motives and establishment of effective marketing strategies in the industry.

**Keywords**—e-Sports, Motivation, Satisfaction, Sports consumer behavior

## I. INTRODUCTION

**S**OUTH Korea’s game industry started to grow enormously with the expansion of the internet infrastructure and the introduction of Star Craft by Blizzard Company. E-Sports, which was created from such growth, is defined 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’ by Korea e-Sports Association. According to the 2010 Game White Book, the size of e-Sports market was KRW 3 trillion, which was 47% of the total game market size of KRW 6.5 trillion (Korea Creative Contents Agency, 2011).

With the lack of new game contents to succeed Star Craft which played the main role in reviving the industry, Korean e-Sports industry created in 1999 began to show stagnant growth since 2007. However, the official launch of League of Legends (LoL) by Liot Games in December 2011 marked the beginning of a new history for e-Sports. It was a huge hit, with

Sang Woo Lee is with Yonsei Graduate School of Information, Seoul, South Korea (corresponding author’s phone: 82-10-6339-1070, e-mail: leesw726@yonsei.ac.kr).

Jae Woong An is with Yonsei Graduate School of Information, Seoul, South Korea (e-mail: ajwoong123@naver.com).

Ji Young Lee is with Yonsei Graduate School of Information, Seoul, South Korea (e-mail: leeji2526@gmail.com).

30,000 players registering within a half-day of its release. As of September 2013, LoL has been ranked No.1 for 61 consecutive weeks with 39.19% share of total online usage time, and the viewing status at the Yongsan e-Sports Stadium has shown a new profit potential of e-Sports in the future.

The e-Sports market shares similar marketing strategies with existing sports, however, stable profit structure and active corporate support are required for continuous promotion of the e-Sports industry. For this, it is important to understand the characteristics of e-Sports consumers, what are their motives for consuming and what factors result in satisfaction (Pyun Do-Young et al., 2009). As the social interest is focused on the negative effects which games can bring, there seems to be a lack of studies on the industrial potential.

This study aims to find the motives for watching the newly-introduced e-Sports, LoL and how such motives effect the viewing satisfaction. Studies on existing sports have consistently discussed the viewing motives and consumer motives of various sports (James & Ross, 2004; Trail & James, 2002; Heo Jin et al., 2004; Jung Seung-hoon et al., 2011), and such motives for watching e-Sports found through these studies are expected to be the base of future in-depth studies on e-Sports consumer motives and establishment of effective marketing strategies in the industry.

## II. THEORETICAL DISCUSSION AND RESEARCH QUESTIONS

### A. Studies on the viewing motives of e-sports

The study by Pyun et al. (2009) found the viewing motives of the newly-introduced e-Sports with focus on Star Craft 1 based on studies on the viewing motives of existing sports games. E-Sports viewing motives of sense of accomplishment, dramatic situation, getting away from everyday life, knowledge of the game, attractiveness of player, and recreation were suggested and the according reliability and feasibility tests were conducted. However, the study by Pyun et al. (2009) was the only domestic study on the viewing motives of e-Sports, and the study results are not suitable for current e-Sports trend since the study was focused on Star Craft 1, which is quite outdated. In this study, the viewing motives of the newly-introduced LoL was observed and the following research question 1 was proposed.

Q1. What are e-Sports audience’s motives for watching the LoL league?

*B. Existing studies on the relationship between viewing motives and viewing satisfaction of sports*

There are still debates on whether e-Sports can be included as official sports. Considering the current situation where the e-Sports marketing lends heavily from the marketing method of existing sports, however, studies on sports marketing which are applicable to e-Sports are needed. Precedent studies on the viewing motives for sports had the purpose of understanding the psychology of the audience and developing the sports industry by utilizing marketing based on such psychology. According to the various studies on existing sports (Farrell, Johnston & Twynam, 1998; Trail, Fink & Anderson, 2003; Mcdonald, Milne & Hong, 2000), it was found that the viewing motives had significant effect on the viewing satisfaction. This study aims to find which of the LoL viewing motives found in research question 1 effect viewing satisfaction. For this, the following research question 2 was proposed.

Q2. Which viewing motives effect LoL viewing satisfaction?

III. RESEARCH METHOD

*A. Survey method and subject*

In this study, the survey method was chosen to answer the research questions. The subject of the research was audience viewing LoL games, and the survey was conducted on the audience who attended the 2013 League of Legends World Championship Finals at the Yongsan e-Sports Stadium on October 5, 2103.

The variables measured in this study were composed of demographic characteristics of e-Sports audience, questions on e-Sports related behavior and questions on motives for watching LoL league. All questions used the Likert 7-point scale and feasibility and reliability tests were conducted through reliability and factor analyses. In total, 105 survey sheets were distributed and 103 survey sheets, excluding 2 with poor answers, were used for data analysis.

*B. Analysis of LoL viewing motives*

The survey questions for investigating the viewing motives were restructured based on studies on criteria of existing sports and sports viewing motives. Pyun et al. (2009) have conducted exploratory research for developing the motives criteria based on studies on viewing motives for existing sports. The viewing motives of getting away from everyday life, sense of accomplishment, dramatic situation, and recreation which were found in the study by James & Ross (2004), the technical aspects suggested in the study by Trail & James (2001), and the factor of attractiveness of player found by Pyun et al themselves were considered. In this study, survey questions on the e-Sports viewing motives found in the study by Pyun et al. (2009) including getting away from everyday life, recreation, sense of accomplishment, dramatic situation, skills, social interaction and attractiveness of players, were established. It was also was found that the commentator played an important role in

watching the LoL games by conducting a focus group interview on 4 e-Sports users. Also, it was found that the factor of team attachment was an important motives for watching LoL league, since LoL is a team game with 5 players on each side (5:5), unlike Star Craft. Thus, survey questions were composed by adding new viewing motives of team attachment and commentation, aside from the viewing motives found in the study by Pyun et al. (2009)

IV. STUDY RESULTS

*A. Demographic and main variables measurement results*

The demographic characteristics of respondents show that out of the total 103 survey respondents, male took up 82% with 85 male and 18 female respondents. Most respondents were in the 20s, with 13 respondents in their teens, 76 respondents in the 20s, and 14 respondents in the 30s.

The measurement results of main variables indicate that the viewing motive with the highest average value was a psychological motive of enjoying the dramatic situation occurring in games, and the average value was 5.66 and standard deviation was 1.05. This was followed by motives of recreation, commentation and skills. No problems were found on the reliability test of the measurement tools for measuring the viewing motives. (See TABLE I)

TABLE I  
DESCRIPTIVE STATISTICS OF MAIN VARIABLES AND RELIABILITY TEST RESULTS

	Average	Standard deviation	Cronbach's alpha
Getting away	4.6211	1.13884	0.801
Recreation	5.6035	0.97401	0.803
Accomplishment	5.0263	1.44303	0.918
Drama	5.6614	1.05422	0.821
Skills	5.3684	1.21113	0.850
Social interaction	4.4386	1.31752	0.828
Team attachment	4.0947	1.57752	0.878
Attractiveness of player	4.0386	1.42782	0.834
Commentation	5.5333	1.21398	0.799
Viewing satisfaction	5.8456	1.25083	0.944
Total number of samples	103		

*B. Analysis results of correlation between main variables.*

It is necessary to look at the correlation between main variables before suggesting the study results on research questions. For this, the bivariate correlation coefficient was measured. It was found that the variables showing high correlation to viewing satisfaction which is the dependent variable in this study, were recreation (r=0.591, p<0.01), getting

TABLE II  
ANALYSIS RESULTS OF CORRELATION BETWEEN MAIN VARIABLES

	Getting away	Recreation	Accomplishment	Drama	Skills	Social interaction	Team attachment	Attractiveness of player	Commentation	Viewing satisfaction
Getting away	1									
Recreation	0.661**	1								
Accomplishment	0.384**	0.544**	1							
Drama	0.352**	0.453**	0.262*	1						
Skills	0.455**	0.502**	0.179	0.327**	1					
Social interaction	0.222*	0.357**	0.302**	0.313**	0.198	1				
Team attachment	0.350**	0.476**	0.670**	0.253*	0.210*	0.484**	1			
Attractiveness of player	0.431**	0.414**	0.385**	0.175	0.307**	0.264**	0.452**	1		
Commentation	0.539**	0.570**	0.246*	0.293**	0.348**	0.137	0.125	0.496**	1	
Viewing satisfaction	0.525**	0.591**	0.274**	0.336**	0.461**	0.173	0.367**	0.304**	0.490**	1

away from everyday life ( $r=0.525$ ,  $p<0.01$ ), commentation ( $r=0.490$ ,  $p<0.01$ ), and skills ( $r=0.461$ ,  $p<0.01$ ). It was also found that there were high correlation between getting away from everyday life and recreation ( $r=0.661$ ,  $p<0.01$ ), and sense of accomplishment and team attachment ( $r=0.670$ ,  $p<0.01$ ). (See TABLE II)

C. Viewing motives which affect viewing satisfaction

Multiple regression analysis was conducted by setting LoL viewing satisfaction as the independent variable, to find the viewing motives which affect viewing satisfaction in research question 2. It was found that recreation ( $\beta=0.265$ ,  $p<0.1$ ), skills ( $\beta=0.177$ ,  $p<0.1$ ), team attachment ( $\beta=0.337$ ,  $p<0.01$ ), commentation ( $\beta=0.262$ ,  $p<0.05$ ) had effects on the viewing satisfaction. (See TABLE III)

TABLE III  
VIEWING MOTIVES WHICH AFFECT VIEWING SATISFACTION OF LoL

Model	Standardized coefficient	t	Significance probability (p)
	Beta ( $\beta$ )		
Constant		1.459	0.148
Getting away	0.134	1.195	0.235
Recreation	0.265	1.957	0.054
Accomplishment	-0.179	-1.559	0.123
Drama	0.052	0.566	0.573
Skills	0.177	1.861	0.066
Social interaction	-0.119	-1.281	0.204
Team attachment	0.337	2.719	0.008
Attractiveness of player	-0.109	-1.051	0.296
Commentation	0.262	2.349	0.021

V. CONCLUSION AND SUGGESTIONS

This study has aimed to empirically find the factors responsible for the success of LoL as e-Sports, the viewing motives of the LoL game audience, and which of these viewing motives had significant effects on the viewing satisfaction of the audience.

A noticeable point in the study results is that the viewing motives which had significant effects on the viewing satisfaction were team attachment ( $\beta=0.337$ ,  $p<0.01$ ) and commentation ( $\beta=0.262$ ,  $p<0.05$ ), which were newly added factors in this study. Unlike Star Craft 1 which was the major focus in previous studies, LoL is a team game with 5 players on each side and it was found that e-Sports audience felt strongly attached to each team belonging to the league, rather than individual players. In fact, those with stronger sense of team attachment showed higher viewing satisfaction. Through the focus group interview, it was found that the newly-developed viewing motive of commentation, had a profound effect on the viewing satisfaction. As a matter of fact, the LoL league of OnGameNet showed great success in turning one of the former players, Choi Hyun-woo, into a commentator and is receiving great reaction from the audience. This indicates that e-Sports audiences are interested not only in the players or teams but also the commentators, and this suggests that the role of commentator is crucial in vitalization of LoL league in the future. Also, it was found that those who watched LoL for recreational purposes and for acquiring LoL game skills showed higher viewing satisfaction.

It is hoped that the relationship between viewing motives and satisfaction found through this study will serve as a good reference for developing the LoL league and fostering the e-Sports industry as a whole.

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