A new approach via level of addiction in eSports: Investigating participation motives from a marketing perspective

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The development of technology has changed individuals' consumption patterns, and the sport industry is no exception. Electronic sports (eSports), or competitive video gaming competitions, are an emerging sport genre experiencing a great surge in popularity (Jenny, Manning, Keiper, & Olrich, 2016; Warman, 2015). The number of world-wide eSports fans exceeded 205 million including 28 million people in North America and Europe (Casselman, 2015), and 90% of those fans play eSports with any system (e.g., personal computer or gaming console; Fletcher, 2015).

Considering the vast differences in eSports participation and traditional sport participation, traditional approaches to examine this growth may not be appropriate. Studies in eSports, have often applied the concept of addiction to understand consumers. Game addiction is defined "excessive and compulsive use of video games that results in social and/or emotional problems; despite these problems, the gamer is unable to control this excessive use" (Lemmens, Valkenburg, & Peter, 2009, p. 78). Although there have been some arguments that the term "addiction" should be replaced to another term such as "excessive" or "problematic", the key concept of addiction is to identify the extent to which an individual is dependent on anything. While various studies have provided insight into issues such as mental disorders (Loton, Borkoles, & Lubman, 2015), social conflict (Beranuy, Carbonell, & Griffiths, 2012), or sedentary lifestyles (Henchoz, Studer, Deline, N'Goran, Baggio, & Gmel, 2016), little has focused on why people participate. Therefore, the purpose of current study is to investigate participation motives of eSports fans based on the level of addiction. Specifically, this study aims (a) to investigate eSports participation motives to identify which motives are connected to their addiction to the sport and (b) to examine participation motives differences among three groups based on the level of addiction. This study will be guided by the following research questions:

RQ1. Which eSports participation motives predict eSports addiction?

RQ2. What are the differences in participation motives among three levels of addiction (normal, moderate, and high)?

Method and Results

An instrument was adapted to measure 12 different participation motives: Achievement, Aesthetics, Affiliation, Aggression, Competition, Risk-taking, Self-actualization, Self-esteem, Skill mastery, Social facilitation, Stress release, and Value development (McDonald, Milne, & Hong, 2002). Additionally, the current study applied a scale to segment eSports participants: the seven-factor Game Addiction Scale (GAS) (Lemmens et al., 2009).

Data ($n = 368$) were collected via Amazon Mechanical Turk (MTurk) from respondents who identified themselves as eSports consumers and over the age of 18. The sample was predominantly male (68.2%, $n = 251$), Caucasian (71.5%, $n = 263$), and under 30 (33.9%, $n = 235$). To identify normal, potential risk, and high risk levels of addiction, the average score was utilized to divide respondents into three groups (i.e., approximately 33.3% per group). Cronbach's alpha of items was within acceptable ranges from .814 to .905, except the Aggression factor ($\alpha = .67$).

A multiple regression with SSPS version 22.0 was conducted for research question 1. The result ($F_{(12, 355)} = 7.54, p < .01$) revealed the factors explaining significant variance in addiction were Achievement ($b = .41, t = 3.84, p < .01$) and Risk taking ($b = .37, t = 3.75, p < .001$). After dividing survey respondents into three groups (e.g., normal, moderate,

and high) based on level of addiction, a multivariate analyses of variance (MANOVA) was performed for research question 2. The results of multivariate test indicated that there was a statistically effect for eSports addiction on the 12 participation motives ($F_{(24, 708)}$ = 3.86, p < .01, partial η^2 = .12). Univariate analyses of variance (ANOVA) was performed to identify the between-group differences, based on adjusted alpha level using Bonferroni correction (P = 0.01/3 = 0.003). Results showed all participation motives were significantly different between groups except the competition motive ($F_{(2, 365)}$ = 4.23, p = .02, partial η^2 = .02). Results of the Tukey post-hoc analysis illustrated no significant difference in participation motives between moderately addicted eSports participants and highly addicted eSports participants. However, normal eSports participants shared noticeably different participation motives from the other two addiction level groups. Specifically, scores of 11 out of 12 participation motives for normal eSports participants were lower than the other two groups on self-actualization, aesthetics, stress release, affiliation, skill mastery, value development, social facilitation, self-esteem, aggression, achievement, and risk-taking. The groups did not differ on competition.

Discussion and Conclusion

Results of the current study showed achievement and risk-taking motives were the strongest predictors of eSports addiction. In terms of group comparisons, eSports participants equally valued competition regardless of the level of addiction. However, they did differ across all of the other motives as the normal group tended to have lower motivations than the other two groups, with the largest mean differences between the groups in achievement, risk-taking, affiliation, and self-esteem. Taken together, these results suggest achievement and risk are the two most important motives separating normal participants with potential risk users and high-risk users. The importance of achievement is understandable considering the extrinsic and intrinsic reward systems inherent in eSports. Interestingly, risk taking was a significant participant motive influencing eSports addiction. Since eSports are Internet-based games in which participants (e.g., players and/or users) control character(s) in cyberspace, there are no direct risks connected to participants. However, it is possible that eSports participants might consider risks they are facing in games seriously.

References

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