An Exploration of Esports Consumer Consumption Patterns, Fandom, and Motives

Devin Anderson, University of Georgia, USA

Kevin Sweeney, Sam Houston State University, USA

Erica Pasquini, Sam Houston State University, USA

Brent Estes, Sam Houston State University, USA

Ryan Zapalac, Sam Houston State University, USA

ABSTRACT

Esports, or competitive gaming, has become a large market in the entertainment industry, with a total market value approaching \$1 billion USD in 2019. An understanding of esports consumers has become increasingly important as the industry continues to grow and evolve. Using a sample of 374 university students at a large public university, this study examines the motivations and fandom of esports consumers using a modified version of the sport fandom questionnaire (SFQ) and the motivation scale for sports consumption (MSSC). Survey respondents were asked about their consumption of esports in relation to viewership, event attendance, social media usage, and spending. Three stepwise regression analyses were employed to examine the predictive capabilities of esports fandom and esports motivations on esports consumption variables. The results reveal a wide variety of relationships between esports fandom, motivation for consumption, and consumption behaviors.

KEYWORDS

ANOVA, Consumption, Engagement, Fandom, Marketing, Motivation, Regression, Viewership

INTRODUCTION

While the esports industry is a relatively new marketplace, the potential for market growth in this field is substantial. According to Newzoo (2018), the global esports audience, which they define as “all people who watch esports content independent of frequency” (p. 11), is at 380 million. In terms of the economic size of esports, global esports revenue was estimated to be \$906 million annually in 2018, with North America accounting for \$345 million annually, and China for \$164 million annually (Newzoo, 2018, p. 6). As of 2017, the League of Legends World Championship was the most watched esports event on Twitch with 49.5 million hours watched and ticket revenues of \$5.5 million (Newzoo, 2018, p. 6). Other estimates have put the global esports audience at 567 million by the end of 2020, with expected growth to near 800 million by 2023 (Activate, 2020, slide 49).

DOI: 10.4018/IJER.20210101.oa3

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The primary method of spectatorship and fan engagement for esports is largely conducted by live-streaming broadcasts such as Twitch, YouTube Gaming, and Facebook LIVE (Facebook, 2015; Twitch, 2011; YouTube, 2015). Although much of the fascination with esports consumption is based on the industry's popularity with online viewership numbers, the physical attendance aspect should not be overlooked. Physical attendance to esports events such as League of Legends and Dota 2 have achieved record numbers. As Murray (2018) stated, "The first wave of tickets for Dota 2's *The International 5* at the 17,000-seat Key Arena were sold out within five minutes. League of Legends famously sold out the 15,000-seat Staples Center in under an hour back in 2015" (para. 3). The esports industry recognizes the potential for growth in this area as well, as North America's very first set of esports-specific venues were recently built: JOIN Esports Arena in Orange County, California (JOIN Esports Arena, 2015), HyperX Esports Arena in Las Vegas, Nevada (HyperX Esports Arena, 2018), and Esports Arena Oakland in Oakland, California (Esports Arena Oakland, 2018).

Due to the newness of the esports industry, the economics and fan engagement that drive the industry is little understood, in terms of revenues, audience, and viewership. While this provides many potential niches within the space for individual organizations, this also means that there is uncertainty in what approach organizations within the industry should take to drive fan engagement and consumption of their product. The purpose of this research is to empirically link different aspects of esports fandom and motivations of esports fans to their consumption habits. More specifically, this research aims to extend findings from the extant literature by examining how esports consumers motivations and fandom relate to many different esports consumption habits, such as watching streams, attending live events, or posting on social media. In a sport management context, acquiring supportive information that focuses on consumer identification, motivation, and consumption behaviors within esports could help stakeholders in the industry better understand which aspect of the product consumers align with. This is important to note for marketing strategies and other tactics such as segmentation, which will help divide the heterogeneous esports consumer base when pushing marketing initiatives. Furthermore, having a clearer understanding of the predictive potential of fandom and motivations on consumption behaviors of esports fans could be essential to all participants in the esports space, from esports leagues to game developers, teams, streaming organizations, and marketers who will potentially conduct promotional and advertising in esports.

BACKGROUND

Motivations for Sport Consumption

Research in sport consumer behavior has typically been split between the early pioneers Hebb (1955) and Deci (1971). While Hebb (1955) defines motivation as procedures that energize and direct purposeful behavior, Deci (1971) conceives that motives can encourage behaviors due to the enjoyment generated by the activities. Schiffman and Kanuk (2004) have also proposed their definition on motivation by referring to it as "the driving force within individuals that impels them to action" (p. 87). Considering the many different outlooks on motivations to consume sport, this concept is important when observing the vast amount of money and time consumers input into the sport industry.

There have been a variety of schema established for examining the motivations that drive and induce sport consumption (Funk et al., 2001; Funk, et al., 2012; Hilvert-Bruce et al., 2018). Frameworks such as Maslow's (1943) Hierarchy of Needs, Deci and Ryan's (1985) Self-Determination Theory, and Funk and James' (2001) Psychological Continuum Model (PCM) have all been adopted to identify the numerous motivations that relate to consumers' desire for sport spectatorship. Early frameworks designed for measuring motivations for sport spectatorship are the Sport Fan Motivation Scale (SFMS) from Wann (1995) and the Motivations of the Sport Consumer (MSC) from Milne and McDonald (1999). In Wann's (1995) study, eight motives associated with sport fandom were

proposed: (1) eustress, (2) self-esteem, (3) escape, (4) entertainment, (5) economic, (6) aesthetic, (7) group affiliation, and (8) family ties.

Research by Trail and James (2001) brought up concerns with the SFMS and the MSC, which they contend exhibited limited reliability and validity measures. They presented their refined concepts on the motivations towards sport spectatorship and offered their Motivation Scale for Sport Consumption (MSSC). Trail and James (2001) also conceptualized nine motives, some of which shared common characteristics with Wann's (1995) model: (1) vicarious achievement, (2) acquisition of knowledge, (3) aesthetics, (4) drama/eustress, (5) escape, (6) family, (7) physical attractiveness, (8) physical skills, and (9) social interaction.

These motivations for sports consumption have been linked to actual consumption and participation in many scenarios. For example, the economic factor of the SFMS was shown to be highly correlated with a person's sports gambling behaviors, including frequency and amount wagered (Wann & Ensor, 1999). Fan motivations have been positively associated with attendance of in person sporting events (Lera-Lopez et al., 2012) as well as increased social media interaction with sport organizations (Stavros et al., 2014). Sport organizations have developed extensive marketing plans that include unique social media strategies to create online fan communities, deliver content, and provide customer service (Abeza et al., 2019). Sport fans have utilized social media to broadcast to their friends and followers that they are engaging with their favorite sport organization. Clavio and Walsh (2013) found that fans prefer to create user-generated content (e.g., taking selfies or group photos at an event) with regard to social media use. For sport organizations, knowledge of how sport fans are connecting and sharing content regarding their brand on social media is key for better understanding fan motivations and how to enhance fan relationships (Stavros et al., 2014).

Motivations for Esports Consumption

Previous research concerning the possible motives towards the consumption of esports has been minimal. Early researchers in esports have identified that competition, challenge, escapism, peer pressure, and skill development are fundamental for active esports participation (Lee & Schoenstedt, 2011; Weiss & Schiele, 2013). Seo (2013) posited that the 4E's of the experience economy (educational, escapist, esthetic, entertainment), developed by Pine and Gilmore (1998), play a significant role within the collaborative area between both the publishers and developers of video games, and consumers of esports.

Hamari and Sjöblom (2017) investigated the motivational factors that may influence the frequency of watching esports on the internet. Their instrument consisted of a modified version of the Motivation Scale for Sport Consumption (MSSC) (Trail 2012; Trail & James, 2001), and a dependent variable to pinpoint the frequency of watching esports. Granted, it must be mentioned that no specific esports title was the primary focus for their study. Rather, esports as a singular concept/activity was used as the focal point for responses. The researchers distributed online surveys to popular gaming and esports websites and forums such as Reddit, Twitter, and Facebook. Their results revealed that escaping everyday life, acquisition of knowledge from esports, novelty, and enjoyment of athlete aggression were dominating drivers of increased frequency of watching esports online. The results of the drama aspect did not seem to be significantly associated with esports watching frequency. Even so, the enjoyment of the aesthetics involved in esports games was negatively associated with the frequency of watching esports online. Lastly, the researchers discovered that the perceived skill of the players and watching frequency was small and insignificant, but slightly positive for watching esports on the internet (Hamari & Sjöblom, 2017).

In another study of motives to consume esports, Pizzo et al. (2018) observed the similarities and contrasts that exist between traditional sport spectators' and esports spectators' consumption motives. They sought to compare spectator attendance motives, and the possible effects on attendance frequency for traditional sport events and esports competitions. To obtain data on spectator motives, the researchers incorporated items from both the SII and the MSSC (Trail, 2012). Game attendance

frequency was measured using a self-reporting technique with a single item response. In their study, they collected data in three different contexts: a Korean League soccer match, a sport-themed esports event in the video game FIFA Online 3 (FIFA Online 3, 2012), and a real-time strategy esports event in the video game StarCraft II (StarCraft II, 2010). The results of their data concluded that traditional sport spectators and esports spectators share similar consumption motives such as interest in sport, interest in player, aesthetics, social opportunities, drama, role model, entertainment value, wholesome environment, acquisition of knowledge, skill of athletes, and enjoyment of aggression. They also discovered that there were significant differences in the other areas such as vicarious achievement, excitement, physical attractiveness, and family bonding between traditional sports and esports. Pizzo et al. (2018) also discovered that for interest in traditional sport, excitement, interest in player, drama, and wholesome environment were predictors of game attendance frequency for live events. Moreover, they deduced that for interest in esports, vicarious achievement, interest in player, aesthetics, role model, social opportunities, entertainment value, family bonding, and skill of the athletes were predictors of game attendance frequency for live events.

In a more recent study conducted by Cushen et al. (2019), they examined the differing degrees of motivations between traditional sport fans and esports fans. There were no specific esports titles or traditional sports mentioned for observation. All participants had to complete an esports familiarity assessment before starting the Sport Fandom Questionnaire (SFQ) (Wann, 2002), Sport Fan Motivation Scale (SFMS) (Wann, 1995), and the Sport Spectator Identification Scale (SSIS) (Wann & Branscombe, 1993). Once the surveys and questionnaires were complete for esports-related content, an identical set of questions had to be answered for traditional sports. In their findings, it was indicated that there are motivational similarities (i.e. escape, self-esteem, group affiliation, and stress relief) and differences (i.e. entertainment, learning, and family) between fans of traditional sports and esports fans.

Curley et al. (2017) incorporated a unique approach to their study by adopting the MSSC to examine the motivational factors involved with fans and players of competitive Overwatch. The dependent variable of “how many hours of Overwatch esports content per week” was used in their study. The researchers distributed online surveys to websites such as Reddit, Twitter, and Facebook. Their results concluded that fans of Overwatch esports strongly agreed with the statements that were related to factors such as aesthetics, acquisition of knowledge, skill of the professional players, and the drama associated with competitive play. Inversely, fans of Overwatch esports were strongly unmotivated by displays of aggression by the players and slightly unmotivated by vicarious achievement associated with their teams.

Sport and Esports Fandom

An area of research within identification studies known as sports fandom will be particularly important for this research. Work on this subject has been led by Wann (2002), as he is credited for developing the first instrument for measuring a sport fan’s level of identification with their favorite sport. Wann developed the Sport Fandom Questionnaire (SFQ) as “a measure of one’s identification with his or her role as a sports fan” (p. 104). It must be noted that there is a clear distinction between team identification and sport fandom identification. As Wann (2002) explained, “team identification involves one’s psychological connection to a team or player while sport fandom identification involves one’s self-perceptions as a sport fan” (p. 104). The original instrument contains five questions (Wann, 2002, p. 115): (1) “I consider myself to be a sports fan,” (2) “My friends see me as a sport fan,” (3) “I believe that following sport is the most enjoyable form of entertainment,” (4) “My life would be less enjoyable if I were not allowed to follow sports,” and (5) “Being a sport fan is very important to me.”

Esports fandom research has been minimal (Cushen et al., 2019; Hamari & Sjöblom, 2017; Strum, 2020), and researchers suggest that there is still much to be learned about esports fans. Only one study has empirically examined esports fandom directly (Cushen et al., 2019). When focusing on esports, Cushen et al. (2019) observed the differences of team or player identification between traditional

sports and esports. Their findings revealed that individuals who exhibit high levels of traditional sport fandom also exhibit high levels of esports fandom. Additionally, the results of their study shed light on the occurrence that average identification for traditional sports teams and players was higher than esports teams and player identification (Cushen et al., 2019). Given the strong esports presence in their study, the turnout can attest to the realization of the universal magnitude of traditional sports and how solidified they are in our society.

METHODOLOGY

To investigate the relationship between esports fandom, motivations, and consumption behaviors, a survey was administered to a population of university students at a large public university in the southern region of the United States. While this population certainly does not represent the entirety of esports consumers, it is a prominent demographic within esports fandom, estimated to make up more than 70% of esports fans (Global Web Index, 2017, p. 3). Details on the survey instrument and the study participants are presented in this section.

Participants

Prior to the study, the researchers sought approval from the Institutional Review Board (IRB). After IRB approval, a convenience sample of 611 participants was recruited for analysis. The participants included students from a core class offered at a large state university located in the southern region of the United States. As a result, not all students were familiar with esports. Out of the 611 survey respondents, 407 indicated some familiarity or fandom within esports. Out of those 407 respondents, 374 completed the entire survey. We excluded those respondents indicated that they were unfamiliar with esports, as well as those that did not complete the entire survey. Thus, as a result, our final sample consisted of 374 ($N = 374$) participant surveys. In terms of demographics, the expected age range for esports consumption aligned with previous esports studies that also observe the consumption of esports (i.e., Curley et al., 2017; Cushen et al., 2019; Hamari & Sjöblom, 2017; Pizzo et al., 2018).

Most of the participants were in the traditional college student age range of 18 - 24. The mean age of the participants in this study was 20.46 years of age with a standard deviation of ± 2.808 . Regarding gender representation of the participants, females make up slightly less than half of the sample with 181 participants to 193 males. An overwhelming majority of the race/ethnicity represented in this study derived from African Americans/Blacks and Caucasians/Whites with a combined n of 291 (77.8%). In terms of academic standing at the university used to sample this study, sophomores were the most reported classification with n of 140 (37.4%). A further breakdown of the descriptive statistics is shown in Table 1 and Table 2.

Table 1. Age and educational demographics of participants

Age		University Education	
18-24	360	Freshman	97
25-34	14	Sophomore	140
35+	0	Junior	93
Mean	20.46	Senior	44

Table 2. Race / ethnicity demographics of participants

Race/Ethnicity	
African American/Black	79
American Indian and Alaskan Native	15
Asian	14
Hispanic (Latino/Latina)	42
Native Hawaiian and Pacific Islander	3
White	212
Other (Biracial, Arab/Mediterranean, etc.)	9

Procedure

After receiving approval from the class instructor, the primary researcher physically visited classrooms and verbally announced the purpose and procedures of the study. The course where the survey was administered was one of three courses that could be used to satisfy a university wide requirement, and most students elect to take this course over the other two offerings. Thus, this course contains students from all majors and disciplines on campus wishing to fulfill this part of their university requirement, making it a representative sample of this university's general population. Participants were provided the opportunity to complete the survey on an available electronic device such as a mobile device, laptop, or tablet. Paper survey packages were also available for participants should they experience technical difficulties or not have access to a compatible device. The estimated completion time for the survey package was 10 to 15 minutes. An informed consent form was presented at the beginning of each survey package informing participants of the study, its intent, and their rights regarding their voluntary participation in the study. No personally identifying information was collected throughout any portion of the survey. Once the students voluntarily agreed to participate, the primary researcher provided a link to the survey website (offered via Qualtrics). Once all surveys were completed and submitted, the participants were thanked for their participation and the primary researcher then exited the classroom. The data collection process for this study took place in April 2019 and was available for three weeks.

Instrumentation

At the time of this writing, there were a limited number of instruments that have been developed specifically for esports consumers to measure their fandom or motivations. Therefore, previously validated fandom and motivation scales used in traditional sports were modified to provide a general basis of understanding of esports consumers. The survey was comprised of a series of brief questionnaires to gather general demographic information while further examining esports consumers in terms of: (a) esports fandom and fandom tied to their favorite esports titles; (b) intrinsic motivators that drive their esports consumption; and, (c) consumption behaviors in the forms of attendance and viewership, social media usage, and spending towards esports-related merchandise. Before administering the survey to participants, the survey instruments were subject to review by a panel of experts in the fields of sports marketing and esports. Based on their recommendations, two key modifications to the survey instrument were made, including the list of esports games that participants could choose from as well as the removal of the "athleticism" component of the MSSC.

The survey began with gathering general descriptive statistics on age, race/ethnicity, and academic classifications of the participants. Next, the researchers wanted to determine exactly which esports title

the participants reported the most frequently. To obtain this data, and to pinpoint specific behavioral responses, the researchers comprised a brief list of the top esports titles across all platforms and genres. If participants were not able to locate their favorite esports title from the list provided, they were given the opportunity to write-in their favorite esports title, and answer the questions based off their entry. If participants selected that they were unaware of “esports”, the participants concluded their participation in the survey and did not complete the remaining instruments.

To measure esports fandom, Wann’s (2002) Sport Fandom Questionnaire (SFQ) was used to observe the fandom profiles of (a) general esports consumers and (b) their fandom towards their favorite esports title. The researchers chose to present two slightly modified versions of the SFQ which adopted the existing SFQ scales for the esports context. Each modified version numbered five questions. The instrument is designed to collect with Likert scale response options ranging from 1 (strongly disagree) to 7 (strongly agree). The first modified SFQ was used to measure a participant’s general esports fandom. As an example, the modified SFQ that was used to measure general esports fandom contained the questions: (1) I consider myself to be an esports fan, (2) My friends see me as an esports fan, (3) I believe that following esports is the most enjoyable form of entertainment, (4) My life would be less enjoyable if I were not able to follow esports, and (5) Being an esports fan is very important to me.

To measure a participant’s fandom towards their favorite esports title, Wann’s (2002, p. 115) Sport Fandom Questionnaire (SFQ) was also used and modified. This scale varied depending on the participant’s response to the question about their favorite esports title. The modified SFQ that was used to measure fandom towards a specific esports title contained the following questions: (1) I consider myself to be fan of [insert favorite esports title], (2) My friends see me as a fan of [insert favorite esports title], (3) I believe that following [insert favorite esports title] is the most enjoyable form of entertainment, (4) My life would be less enjoyable if I were not able to follow [insert favorite esports title], and (5) Being an esports fan is very important to me. Prior studies conducted in traditional sports settings that incorporated the SFQ revealed that the instrument is a sound assessment tool, and is normally distributed, internally consistent, reliable, and valid (Wann & James, 2019).

The Motivation Scale for Sport Consumption (MSSC) (Trail, 2012; Trail & James, 2001) was selected and modified to analyze spectator motives for consuming esports. The original MSSC possessed 31 items, but there have been revisions in subsequent iterations. As a result, the family subscale was removed, and the escape subscale was reworded. Following the suggestions of Trail (2012 p. 3), the researcher also added the “novelty” and “enjoyment of aggression” subscales. On the advice of a panel of sports marketing and esports experts, the item regarding “athleticism” was removed because of difficulty in translating the underlying meaning of this measure into an esports context. For the purposes of this study, the MSSC was comprised of 30 items along ten constructs. Participants responded to statements via a seven-point Likert scale from “strongly disagree” to “strongly agree”. The ten constructs chosen were slightly modified to fit an esports context and are as follows: vicarious achievement, aesthetics, drama, escapism, acquisition of knowledge, skill of the players, social interaction, personality of the players, novelty, and enjoyment of aggression (Trail, 2012, pp. 7-9). Each of the modified constructs was reviewed by a panel of sports marketing and esports experts for contextual relevance in a manner similar to Trail and James (2001). The MSSC has shown good internal consistency ($\alpha = .72$ to $.89$) across multiple studies (Trail, 2012). The Average Variance Extracted (AVE) values have also been determined to be good, as values have ranged from .51 to .82 (Trail & James, 2001).

Finally, nine items evaluating esports consumption behaviors over the past six months were included in the survey. These items were targeted toward several different broad categories of consumption behaviors, which were subsequently organized into three subscales. Namely, those subscales were defined as (1) Attendance and Viewership, (2) Spending, and (3) Social Media Usage. These were based on the consumption behaviors detailed in Trail and James (2001, pp. 119-122). The subscales that make up each of the above consumption items were modified for an esports

context, and were evaluated by a panel of sports marketing and esports experts before the survey was administered. The three modified subscales and the consumption items comprising those subscales are provided in Table 3.

Table 3. Consumption subscales and associated items

Subscales
Attendance and Viewership (4 items; $\alpha = .750$)
In the past six months, how often would you say you attended live esports competitions (i.e. large international competitions, smaller regional competitions, community LAN's (Local Area Network), etc.)?
In the past six months, how often per week would you say you watch esports competitions on a mobile device (i.e. personal phone, iPad, tablet, laptop, etc.)?
In the past six months, how often per week would you say you watch esports on cable/television?
In the past six months, both virtually and/or in-person, how many "watch parties" have you attended to spectate esports competitions (i.e. large national/international competitions, smaller regional competitions, community LAN's (Local Area Network), etc.)?
Spending (3 items; $\alpha = .849$)
In the past six months, how much money have you spent on esports-related apparel?
In the past six months, how much money have you spent on tickets to a live esports competition (i.e. large international competitions, smaller regional competitions, community LAN's (Local Area Network), etc.)?
In the past six months, how much money have you spent on "additional" content towards a specific streaming platform (i.e. Twitch, YouTube, Patreon, etc.) that involves your favorite gaming and/or esports title/competitor/personality?
Social Media Usage (2 items; $\alpha = .752$)
In the past six months, how many new social media accounts have you followed that are esports-related (Twitter, Instagram, Facebook, Reddit, small community forums, etc.)?
In the past six months, how often per week would you say you post, share, and/or engage with others about esports content on social media (Twitter, Instagram, Facebook, Reddit, small community forums, etc.)?

STATISTICAL ANALYSIS

Descriptive statistics on age, gender, race/ethnicity, and academic classification were analyzed. A breakdown of the participants chosen favorite esports title, or written in title, was also gathered. As it is a unitary measure of fandom, the scores of both versions of the SFQ (i.e. general esports fandom and esports fandom with a specific title) were summed to form an index for each focal point. Additionally, the scores for each of the MSSC constructs were summed to form scores as recommended by Trail (2012). The average scores from the MSSC and the two SFQ scales were then utilized in a One-Way ANOVA analysis to uncover any group differences. Three stepwise regression analyses were also employed to examine the predictive capabilities of esports fandom and esports motivations on esports consumption variables such as attendance and viewership, social media usage, and spending on esports-related merchandise. All data obtained from Qualtrics was further analyzed in SPSS.

Results

While observing which esports titles the respondents selected as their favorite to spectate, the results were stratified across a variety of different esports titles and associated communities. These titles included (ranked in order of the number of reported responses): (1) Call of Duty (Call of Duty: Black Ops 4, 2018), (2) Super Smash Bros (Super Smash Bros. Ultimate, 2018), (3) Fortnite (Fortnite Battle

Royal, 2017), (4) Tom Clancy's Rainbow Six Siege (Tom Clancy's Rainbow Six Siege, 2015), (5) Pokémon (Pokémon Sword, 2019), (6) Rocket League (Rocket League, 2015), (7) Street Fighter (Street Fighter V, 2016), (8) League of Legends (League of Legends, 2009), (9) Counter-Strike: GO (Counter-Strike: Global Offensive, 2012), (10) Overwatch (Overwatch, 2016), (11) Hearthstone (Hearthstone, 2014), and (12) Dota 2 (Dota 2, 2013), among others. Participants who did not locate their favorite esports titles from the list that was provided by the primary researcher were given the opportunity to type in their own response. There were 34 different responses across a variety of esports titles such NBA 2K (NBA 2K21, 2020), Madden (Madden NFL 21, 2020), Tekken (Tekken 7, 2015), Mortal Kombat (Mortal Kombat 11, 2019), FIFA (FIFA 21, 2020), Injustice (Injustice 2, 2017), Halo (Halo 5: Guardians, 2015), and Apex Legends (Apex Legends, 2019). The response totals for each esports title selected, as well as the number of participants who selected that they were completely unfamiliar "esports" or "competitive gaming" can be found in Table 4.

Table 4. Favorite esports titles to spectate

Esports Titles	N
Call of Duty (CoD)	114
Super Smash Bros	95
Fortnite	63
Tom Clancy's Rainbow Six Siege (R6S)	22
NBA 2K	18
Pokémon	15
Rocket League	14
Street Fighter	12
League of Legends (LoL)	11
Counter-Strike: GO	9
Overwatch	8
Hearthstone	7
Dota 2	3
Madden	3
Mortal Kombat	3
Halo	3
Apex Legends	3
FIFA	2
Tekken	1
Injustice	1
Completely unfamiliar with esports	177
Game titles selected that are not esports	27

A one-sample *t* test was conducted on the SFQ scores to evaluate whether there was a significant difference between general fandom of esports and fandom for a specific esports title. The sample mean for fandom of general esports consumers 17.23 (SD = 7.04), $t(422) = 50.31, p < .001$ was significantly different from fandom towards a specific esports title, 20.64 (SD = 6.80), $t(415) = 61.91, p < .001$.

The 95% confidence interval for the SFQ mean ranged from 17.23 to 20.64. These results suggest that general esports fandom is significantly ($p < .001$) lower than fandom with a specific esports title.

A one-way between subjects analysis of variance (ANOVA) was conducted to evaluate the relationship between general esports fandom and the different esports titles. The independent variable included the esports title that the participant reported as being their favorite. The dependent variable was the score of the Sport Fandom Questionnaire (SFQ) which assessed an individual's level of fandom towards esports in general. The results revealed that there was a significant difference in general esports fandom between the different esports titles at the $p < .05$ level, $F(12, 410) = 5.264, p < .001$.

A one-way between subjects analysis of variance (ANOVA) was conducted to evaluate the relationship between esports specific title fandom and the different esports titles. The independent variable was the different esports titles that were presented to the participant and they were instructed to select or write-in their favorite title. The dependent variable of esports specific title fandom consisted of the SFQ that was directed at their favorite title as opposed to their general esports fandom. The results revealed that there was a significant difference between the different esports titles and the esports title specific fandom at the $p < .05$ level, $F(12, 403) = 6.735, p < .001$.

Originally, there were nine questions created to measure the consumption behaviors of esports consumers. To provide a more detailed analysis of the data, three subscales were formed by the sum of the participants' responses and then categorizing into the predominant consumption behaviors of attendance and viewership trends, social media usage, and spending on esports-related merchandise. The 'Attendance and Viewership' subscale consisted of four items (Cronbach's $\alpha = .750$), the 'Social Media' subscale included three items (Cronbach's $\alpha = .752$), and the 'Spending' subscale was comprised of two items (Cronbach's $\alpha = .849$). Please see Table 3 for a description of the subscales and their associated items.

Three stepwise multiple regression analyses were conducted to evaluate how well the independent variables of the SFQ – general esports fandom, SFQ – specific esports title, and the 10 subscales of the MSSC predicted the different consumption behaviors related to attendance and viewership, social media, and spending. 'Attendance and Viewership' of esports content ranged from attending live esports events, watching online, watching via cable or television, and attending virtual and in-person watch parties. The 'Social Media' consumption behavior was labeled by how many new social media accounts the participants have recently followed, and how often do they share, post, or engage with others about esports content. The last consumption behavior, 'Spending', consisted of questions asking how much money the participants have spent over the past six months on additional content, esports-related apparel, and tickets to attend live esports events.

The first stepwise regression analysis used to predict 'Attendance and Viewership' was significant, $F(5, 369) = 50.246, p < .001$. For the attendance and viewership consumption behavior, there were five statistically significant ($p < .01$) predictors related to this behavior. Four of the predictors were positively weighted (social interaction, general esports fandom, vicarious achievement, and skill of the athletes), while one of the predictors was negatively weighted (drama). However, it is important to note that social interaction accounted for most of the variance in the model, with 31.7% explained variance with regards to attendance and viewership consumption of esports. This makes sense as one of the large draws of attending an in person esports event is the ability to see the event with other people enthusiastic about the esports on display. In terms of overall effect size, the largest coefficient ($B = .257$) belongs to the skill of the esports athletes. This seems to suggest that, in terms of viewership and attendance, having highly skilled participants is a dramatic driver in actual attendance behaviors. Presented in Table 5 is the stepwise regression analysis employing the different predictors on attendance and viewership consumption behaviors of esports consumers.

The next stepwise regression analysis used to predict 'Social Media' usage was significant, $F(4, 370) = 50.393, p < .001$. When observing the social media consumption behavior, there were four statistically significant ($p < .01$) predictors associated with this behavior. Three of the predictors were positively weighted (general esports fandom, vicarious achievement, and skill of the athletes), while

Table 5. Summary of stepwise regression analysis for esports fandom and motivation variables predicting attendance and viewership consumption (N = 374)

	Model 1			Model 2			Model 3			Model 4			Model 5		
Variable	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β
Social Interaction	.34	.02	.56	.22	.03	.36	.11	.04	.19	.12	.04	.20	.12	.04	.20
General Esports Fandom				.11	.02	.29	.09	.02	.24	.08	.02	.21	.09	.02	.23
Vicarious Achievement							.11	.03	.18	.10	.03	.17	.11	.03	.18
Skill of Esports Athletes										.11	.05	.14	.25	.06	.30
Drama													.12	.04	.22
Constant	2.1	.32		1.5	.33		1.5	.33		1.1	.35		1.5	.37	
R ²	.31			.36			.37			.38			.39		
F for change in R ²	174.26***			107.15***			75.96***			58.97***			50.24***		

Note: * $p < .05$, ** $p < .01$, *** $p < 0.001$. Table 5 shows both the beta (B) and standardized (β) weight predictions.

Table 6. Summary of stepwise regression analysis for esports fandom and motivation variables predicting social media usage consumption (N = 374)

	Model 1			Model 2			Model 3			Model 4		
Variable	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β
General Esports Fandom	.12	.01	.53	.08	.01	.36	.06	.01	.29	.06	.01	.27
Vicarious Achievements				.10	.02	.27	.08	.02	.22	.11	.02	.30
Skill of Esports Athletes							.08	.02	.16	.07	.02	.15
Physical Attractiveness										-.04	.02	-.12
Constant	.94	.19		.68	.19							
R ²	.28			.32			.33			.34		
F for change in R ²	147.30***			90.56***			64.47***			50.39***		

Note: * $p < .05$, ** $p < .01$, *** $p < 0.001$. Table 6 shows both the beta (B) and standardized (β) weight predictions.

one of the predictors was negatively weighted (physical attraction). It is important to note that general esports fandom accounted for most of the variance in the model, with 28.1% explained variance in predicting social media usage. However, the biggest total effect is for vicarious achievement ($B = .111$). The results suggest that the largest use of social media is to display your fandom for a specific team or player and interact with other social media users around that fandom. Presented in Table 6 is the stepwise regression analysis employing the different predictors on social media usage.

The final stepwise regression equation used to predict ‘Spending’ was significant, $F(2, 372) = 45.914$, $p < .001$. When observing the spending consumption behavior, there were two statistically significant ($p < .01$) predictors associated with this behavior. Both predictors were positively weighted (vicarious achievement and social interaction), with vicarious achievement accounting for much of

the variance in the model (17.0% explained variance) as well as the largest effect size ($B = .105$). The results seem to suggest that esports consumers are motivated to spend money when the team they support is successful, potentially to share that success with other fans. Presented in Table 7 is the stepwise regression analysis employing the different predictors on spending consumption behaviors of esports consumers.

Table 7. summary of stepwise regression analysis for esports fandom and motivation variables predicting esports spending (N = 374)

Variable	Model 1			Model 2		
	B	SE B	β	B	SE B	β
Vicarious Achievement	.17	.01	.41	.10	.02	.25
Social Interaction				.09	.02	.22
Constant	1.6	.23		1.6	.23	
R ²	.17			.19		
F for change in R ²	77.72***			45.91**		

Note: *p < .05, **p < .01, ***p < 0.001. Table 7 shows both the beta (B) and standardized (β) weight predictions.

CONCLUSION

The results from the *t-test* concluded that general esports fandom was reported to be much lower for esports consumers as compared to their fandom towards their favorite esports title. This indicates that esports fans do not seem to be fans of esports in general, but rather fans of specific esports titles within the marketplace. For example, this result suggests that if an esports consumer's favorite esports title is NBA 2K, their fandom for that specific game and its associated esports may be higher than their fandom with the broader landscape of esports.

In contrast to the results of previous studies on esports consumption, enjoyment of aggression was not a significant predictor of any of the three consumption variables in this study. In their studies, Hamari & Sjöblom (2017) and Pizzo et al. (2018) discovered that enjoyment of aggression had an influence on the consumption behavior of esports. It is important to note that both of those studies examined attendance and viewership in virtual and/or live environments. Given previous research findings examining the enjoyment of aggression motive in esports contexts, the lack of significance for this predictor is rather surprising, especially since the majority of esports titles reported have an aggressive element present (see Table 4). This could be due to the type of sample collected or sample demographics: the sample in this study consistent of a general student population and didn't not specifically target esports consumers through dedicated channels (such as Facebook groups of forums dedicated to games and esports), and there was a much higher proportion of females in this study than in previous studies on esports consumption. It will be important for future research to further examine the predictive role that enjoyment of aggression has upon esports consumption, especially as it relates to specific titles which might be associated with more aggressive behaviors or gameplay (i.e. first person shooters versus strategy games).

Pizzo et al.'s (2018) study partially supports the notion that vicarious achievement was related to esports consumption; They found that vicarious achievement had a negative effect on the consumption of one esports title, while the other had a positive effect. This study found that vicarious achievement was positively associated with esports event attendance and viewership. The results from the current study suggest that when the team or player succeeds, esports consumers are more likely to attend

live esports events or watch them compete via livestream. Additionally, esports consumers who feel a strong sense of vicarious achievement may also use their social media as a method of expressing their support and excitement to their following because of how well their team competed or placed in an event or tournament. The results of this study also suggest that if an esports consumer's favorite team or player is successful, they seem to be more willing to spend money on esports-related content (such as donating to their favorite players stream) and merchandise (their favorite team or player's jersey). This behavior could be used as a method of showing their fan loyalty and openly pledging their allegiance to their favorite team or player. Thus, esports marketers would be well advised to highlight vicarious achievement throughout their marketing efforts.

Based on this study, we found that social interaction is an important part of predicting attendance and viewership (i.e., attending live events, watch parties, or participating in live-stream chats whenever their favorite team or player is competing), which relates to Cushen et al.'s (2019) study as they also speak to the importance of the socialization process. This is likely because attendance of events and stream viewership are places that esports consumers can discuss amongst others that share the same hobby, passion, or appreciation for esports-related content. Thus, these activities could give them the opportunity to feel as if they are part of a larger group of like-minded individuals.

Other factors can also positively influence esports consumption: skill of professional esports players and general esports fandom both positively related to esports event viewing and attendance. It can be inferred from the present study that esports consumers who appreciate, admire, and respect the high level of skill involved in competition are more likely to attend a live esports event or tune into the stream that involves their favorite esports team or player. Whether or not general esports consumers will eventually attach to a specific team or player, thus fostering their specific title fandom, is up for debate. To that extent, considering the wide range of esports titles and the unique fan communities that are associated with them, the industry may be able to benefit by working to develop a group of general esports consumers. The present study may imply that general esports consumers could be more receptive to a wider variety of esports products and services, which could lead to more opportunities for diversifying attendance and viewership behaviors. Furthermore, the results from this study reveal that general esports consumers are more likely to use social media and engage with others for the simple fact that they would like to interact with other esports fans.

Practical Implications

There were two unique demographics of this study that cause it to differ from other esports-related studies that observed esports consumption. The first was the gender breakdown of the sample participants. The sample employed in the current study represents a higher female-to-male ratio of participants than most other esports-related studies that have been conducted previously. The second demographic that is unique to the present study was the number of participants who reported their academic classification. This age demographic is a core demographic for esports, and in recent years esports has begun making its transition into both interscholastic and intercollegiate settings. As the esports industry expects to grow and gain popularity, junior varsity and varsity esports programs have also been on the rise. Esports programs at the high school level could provide an extracurricular activity, or a viable varsity esports opportunity, for the students enrolled (i.e., Crook, 2018). The results from the current study indicate that undergraduates are indeed interested in esports and suggests how consumption motivations for this core esports demographic might relate to actual consumption habits, giving the esports industry insight into how to better market themselves and their products to this demographic.

As a result, universities that are interested in methods to increase student enrollment or are considering the possibilities of adding a club or varsity-level esports team could capitalize on the opportunity to attract esports consumers and boost overall enrollment. This is a tactic that has worked in traditional sport settings (i.e., Perez, 2012). As revealed from this study, if universities decided to embrace esports programs, a useful strategy could be to focus on undergraduate students

to increase the engagement of the students who consume esports. Future research should investigate the undergraduate recruiting capability of esports for a university.

The data concluded from this study suggest that there is a key takeaway for sport marketers, in-house marketing teams for esports organizations, and both endemic and non-endemic brands who choose to venture into esports. As the data from this study reveals, esports consumers can have their general esports fandom, but this fandom appears to be smaller in magnitude than their fandom for a particular esports title. Instead of focusing on the general esports consumer, the intended message for each group of individuals that associate with their favorite esports title should be uniquely directed to their interest with that specific game. As an example, an esports organization may actively have esports teams in *Call of Duty*, *Super Smash Bros.*, and *League of Legends*, but the marketing ploys delivered to the fans of their organization should not be a “one size fits all” concept. Instead, each subset of fans that demonstrate fandom with their favorite esports title should be carefully considered so they may be catered to accordingly.

Limitations and Future Research

This study has several limitations. First, while the number of participants is large our sample represents a core demographic for the esports market, more studies like this could be done with other demographics, including esports fans in countries other than the United States, esports fans that did not attend college, or with older esports fans (a demographic that might be particularly interesting, as they potentially have more money to spend on esports consumption) to provide insight into the relationships between fandom, motivations, and esports consumption in other contexts or with other demographics. Second, at the time of survey development, the item in the MSSC related to athleticism was removed due to difficulty in translating the underlying meaning of the item into an esports setting (as the original intent of the item was to measure admiration of players skills in a physical sense). Recent research has included variations of this scale (e.g. Bowman & Cranmer, 2019). In a broader sense, future research could focus on developing and adjusting well known scales like the MSSC or SFQ to be more specific to the esports context. Third, while our empirical results suggest that fandom for individual esports titles is larger than fandom for esports in general amongst those familiar with esports, future research could further investigate this relationship to see if it might be specific to certain esports titles or a general trend amongst esports fans of most or all titles. Third, we believe that it would be very interesting to exam a couple of games within a specific esports genre more closely (for example, comparing *Call of Duty* to *Counter-Strike: GO* and *Dota 2* to *League of Legends*) to see if the relationship between motivations and consumption are the same within genres, or if they really are game specific. This could also help isolate how different demographics may moderate these results: while our sample has a significant number of women when compared to other studies, high number of games and genres makes it difficult to separate out potential moderation effects reliably. Finally, while this paper measured the how esports consumer’s motivations and fandom may lead to consumption behaviors, it does not relate those to specific spending amounts. While there are categories of expenditure in the survey instrument, more granular data on amounts spent would allow for the creation of more specific models which detail not only expected consumer behaviors, but how those behaviors may translate directly into revenues and profits for esports organizations.

REFERENCES

- Abeza, G., O'Reilly, N., & Seguin, B. (2019). Social media in relationship marketing: The perspective of professional sport managers in the MLB, NBA, NFL, and NHL. *Communication & Sport*, 7(1), 80–109. doi:10.1177/2167479517740343
- Activate. (2020). *Think again: tech & media outlook 2020* [PowerPoint slides]. <https://activate.com/#outlook>
- Apex Legends (PC version) [Video game]. (n.d.). Sherman Oaks, CA: Respawn Entertainment, LLC. <https://www.ea.com/games/apex-legends>
- Call of Duty. Black Ops 4 [Video game]. (2018). Santa Monica, CA: Activision. <https://www.callofduty.com/blackops4>
- Clavio, G., & Walsh, P. (2013, March 4). (2013). Dimensions of social media utilization among college sport fans. *Communication & Sport*. Advance online publication. doi:10.1177/2167479513480355
- Counter-Strike. Global Offensive (PC version) [Video game]. (n.d.). Bellevue, WA: Valve. <https://blog.counter-strike.net/>
- Crook, J. (2018). *PlayVS, bringing esports infrastructure to high schools, picks up \$15 million*. <https://techcrunch.com/2018/06/04/playvs-bringing-esports-infrastructure-to-high-schools-picks-up-15-million/>
- Curley, A., Nausha, M., Slocom, J., & Lombardi, D. (2017). *What motivates esports fans? A data-driven approach to business and development strategy* (Unpublished master's thesis).
- Cushen, P., Rife, S., & Wann, D. (2019). The emergence of a new type of sport fan: Comparing the fandom, motivational profiles, and identification of electronic and traditional sport fans. *Journal of Sport Behavior*, 42(2), 127–141.
- Deci, E., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Springer. doi:10.1007/978-1-4899-2271-7
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18(1), 105–115. doi:10.1037/h0030644
- Dota 2 (PC version) [Video game]. (n.d.). Bellevue, WA: Valve. <https://www.dota2.com/play/>
- Esports Arena Oakland. (2018). <https://www.esportsarena.com/oakland/>
- Facebook. (2015). <https://www.facebook.com/formedia/solutions/facebook-live>
- FIFA 21 [Video game]. (2020). Redwood City, CA: Electronic Arts. <https://www.ea.com/games/fifa>
- Fortnite: Battle Royale (PC version) [Video game]. (2017). Cari, NC: Epic Games. <https://www.epicgames.com/fortnite/en-US/download>
- Funk, D. C., Beaton, A., & Alexandris, K. (2012). Sport consumer motivation: Autonomy and control orientations that regulate fan behaviours. *Sport Management Review*, 15(3), 355–367. doi:10.1016/j.smr.2011.11.001
- Funk, D. C., & James, J. (2001). The psychological continuum model: A conceptual framework for understanding an individual's psychological connection to sport. *Sport Management Review*, 4(2), 119–150. doi:10.1016/S1441-3523(01)70072-1
- Funk, D. C., Mahony, D. F., Nakazawa, M., & Hirakawa, S. (2001). Development of the sport interest inventory (SII): Implications for measuring unique consumer motives at team sporting events. *International Journal of Sports Marketing & Sponsorship*, 3(3), 38–63. doi:10.1108/IJSMS-03-03-2001-B005
- Global Web Index. (2017). *Esports Trends Report*. <https://cdn2.hubspot.net/hubfs/304927/Downloads/Esports-report.pdf?t=1528372092399>
- Halo 5: Guardians (Xbox One version) [Video game]. (n.d.). Redmond, WA: 343 Industries. <https://www.halowaypoint.com/en-us/games/halo-5-guardians>
- Hamari, J., & Sjöblom, M. (2017). What is eSports and why do people watch it? *Internet Research*, 27(2), 211–232. doi:10.1108/IntR-04-2016-0085

- Hearthstone (PC version) [Video game]. (n.d.). Santa Monica, CA: Blizzard. <https://playhearthstone.com/en-us>
- Hebb, D. O. (1955). Drives and the CNS (conceptual nervous system). *Psychological Review*, 62(4), 243–254. doi:10.1037/h0041823 PMID:14395368
- Hilvert-Bruce, Z., Neill, J. T., Sjöblom, M., & Hamari, J. (2018). Social motivations of live-streaming viewer engagement on Twitch. *Computers in Human Behavior*, 84, 58–67. doi:10.1016/j.chb.2018.02.013
- HyperX Esports Arena. (2018). <https://www.hyperxesportsarenalasvegas.com/>
- Injustice 2 [Video game]. (n.d.). Chicago, IL: NetherRealm Studios. <https://www.injustice.com/>
- Join eSports Arena. (2015). <https://www.esportsarena.com/santa-ana/join.html>
- League, R. (2015). *PC version* [Video game]. Psyonix., <https://www.rocketleague.com/>
- League of Legends (PC version) [Video game]. (n.d.). Los Angeles, CA: Riot Games. <https://na.leagueoflegends.com/en-us/>
- Lee, D., & Schoenstedt, L. J. (2011). Comparison of eSports and traditional sports consumption motives. *ICHPER-SD Journal of Research*, 6(2), 39–44.
- Lera-López, F., Ollo-López, A., & Rapún-Gárate, M. (2012). Sports spectatorship in Spain: Attendance and consumption. *European Sport Management Quarterly*, 12(3), 265–289. doi:10.1080/16184742.2012.680897
- Madden NFL 21 [Video game]. (2020). Maitland, FL: Electronic Arts. <https://www.ea.com/games/madden-nfl/madden-nfl-21>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. doi:10.1037/h0054346
- Milne, G. R., & McDonald, M. A. (1999). *Sport marketing: Managing the exchange process*. Jones and Bartlett Publishers.
- Mortal Kombat 11 [Video game]. (2019). Chicago, IL: NetherRealm Studios. <https://www.mortalkombat.com/>
- Murray, T. (2018, 1 June). *Overwatch League finals sell out in two weeks*. <https://esportsobserver.com/overwatch-league-finals-sold-out/>
- National Federation of State High School Associations. (2018). *Esports*. <https://www.nfhs.org/sports-resource-content/esports/>
- NBA 2K21 [Video game]. (2020). Novato, CA: Visual Concepts. <https://www.nba2k.com/>
- Newzoo. (2018). *Global esports market report*. https://asociacionempresarialesports.es/wp-content/uploads/newzoo_2018_global_esports_market_report_excerpt.pdf
- Online, F. I. F. A. 3 (PC version) [Video game]. (2012). Seoul, South Korea: Electronic Arts. <https://eafifa.qq.com/main.shtml>
- Overwatch League Grand Final numbers. (2018, 31 July). <https://www.cynopsis.com/esports-stories/overwatch-league-grand-final-numbers/>
- Overwatch (PC version) [Video game]. (n.d.). Santa Monica, CA: Blizzard. <https://playoverwatch.com/en-us/>
- Perez, S. J. (2012). Does intercollegiate athletics draw local students to a university? *Journal of Sports Economics*, 2(13), 198–206. doi:10.1177/1527002511404509
- Pine, B. J., & Gilmore, J. H. (1998). Welcome to the experience economy. *Harvard Business Review*, 76(4), 97–105. PMID:10181589
- Pizzo, A. D., Baker, B. J., Na, S., Lee, M. A., Kim, D., & Funk, D. C. (2018). Esports vs Sport: A comparison of spectator motives. *Sport Marketing Quarterly*, 27(2), 108–124.
- Schiffman, L. G., & Kanuk, L. L. (2004). *Consumer behavior* (8th ed.). Pearson Prentice Hall.

- Seo, Y. (2013). Electronic sports: A new marketing landscape of the experience economy. *Journal of Marketing Management*, 29(13-14), 1542–1560. doi:10.1080/0267257X.2013.822906
- StarCraft II (PC version) [Video game]. (2010). Santa Monica, CA: Blizzard. <https://starcraft2.com/en-us/>
- Stavros, C., Meng, M. D., Westberg, K., & Farrelly, F. (2014). Understanding fan motivation for interacting on social media. *Sport Management Review*, 17(4), 455–469. doi:10.1016/j.smr.2013.11.004
- Street Fighter, V. [Video game]. (2016). Osaka, Japan: Capcom. <https://streetfighter.com/>
- Strum. (2020). Fans as eparticipants? Utopia/dystopia visions for the future of digital sports fandom. *Convergence: The International Journal of Research into New Media Technologies*, 26(4), 841-856.
- Super Smash Bros. Ultimate (Switch version) [Video game]. (2018). Kyoto, Japan: Nintendo. https://www.smashbros.com/en_US/
- Sword, P. (Switch version) [Video game]. (2019). Tokyo, Japan: Game Freak. <https://www.pokemon.com/us/>
- Tekken 7 [Video game]. (2015). Tokyo, Japan: Bandai Namco. <https://tk7.tekken.com/>
- Tom Clancy's Rainbow Six Siege (PC version) [Video game]. (2015). Montreal, Canada: Ubisoft. <https://www.ubisoft.com/en-us/game/rainbow-six/siege>
- Trail, G. T. (2012). *Manual for the Motivation Scale for Sport Consumption (MSSC)*. <http://sportconsumerresearchconsultants.yolasite.com/resources/MSSC%20Manual%20-%202012.pdf>
- Trail, G. T., & James, J. D. (2001). The Motivation Scale for Sport Consumption: Assessment of the scale's psychometric properties. *Journal of Sport Behavior*, 24(1), 108–127.
- Twitch. (2011). <https://www.twitch.tv/>
- Wann, D. L. (1995). Preliminary validation of the Sport Fan Motivation Scale. *Journal of Sport and Social Issues*, 19(4), 377–396. doi:10.1177/019372395019004004
- Wann, D. L. (2002). Preliminary validation of a measure for assessing identification as a sport fan: The Sport Fandom Questionnaire. *International Journal of Sport Management*, 3, 103–115.
- Wann, D. L., & Branscombe, N. R. (1993). Sports fans: Measuring degree of identification with their team. *International Journal of Sport Psychology*, 24, 1–17.
- Wann, D. L., & Ensor, C. L. (1999). Further validation of the economic subscale of the Sport Fan Motivation Scale. *Perceptual and Motor Skills*, 88(2), 659–660. doi:10.2466/pms.1999.88.2.659 PMID:10483659
- Wann, D. L., & James, J. D. (2019). *Sports fans: The psychology and social impact of fandom* (2nd ed.). Routledge.
- Weiss, T., & Schiele, S. (2013). Virtual worlds in competitive contexts: Analyzing eSports consumer needs. *Electronic Markets*, 23(4), 307–316. doi:10.1007/s12525-013-0127-5
- YouTube. (2015). <https://www.youtube.com/gaming>

Devin J. F. Anderson received his MS in Sport Management from Sam Houston State University in 2019. His prior research interests were in the field of esports studying consumption patterns of esports consumers related to attendance, viewership, spending, and social media usage. He is currently a PhD student in the Sport Management & Policy program at the University of Georgia. His current research focuses on the post athletic career management of Usain Bolt with an emphasis on studying the unique attributes and characteristics of his brand management highlighting his brand image and brand expansion. He is also a Graduate Teaching Assistant for the Department of Kinesiology at UGA where he teaches PEDB Intro to Weight Training courses for undergraduate students.

Kevin Sweeney, Ph.D., is an Assistant Professor of Supply Chain Management in the Department of Management, Marketing, and Information Systems at Sam Houston State University. His research interests include the economics of esports and esports gambling, as well as how customer choices influence the design and management of manufacturing systems. He received his Ph.D. in Management from the University of Maryland in 2015.

Erica Pasquini, Ph.D., received her MS from Ball State University in Sport and Exercise Psychology and her Ph.D. from The University of Southern Mississippi in Sport Pedagogy. Since 2016 she has worked as an Assistant Professor at Sam Houston State University in the Department of Kinesiology. Her research interests cover a wide range of coaching and pedagogical practice, focusing on coaching education, the Coach Expectancy Cycle, and coaching in eSports.

Brent Estes (PhD) is the Graduate Coordinator for the Sport Management Program at Sam Houston State University. He teaches a variety of graduate and undergraduate courses including: Sport Law, Sport Finance, Leadership in Sport, Community & Media Relations, Sport Sociology, Sport Psychology, Sport Administration, and Assessment in Kinesiology. Dr. Estes also coordinates graduate internship experiences. His primary research interests are in the areas of organizational behavior, legal issues, and finance. Dr. Estes earned his Ph.D. in Sport Administration from Florida State University. Prior to his career in academia, Dr. Estes worked in professional baseball and college athletics.

Ryan K. Zapalac (PhD) received his PhD in Kinesiology from the University of Houston in 2004. Dr. Zapalac joined Sam Houston State University (SHSU) in 2006 and is currently a Professor within the Department of Kinesiology and an Associate Dean within the College of Health Sciences. He is also one of the lead faculty in the graduate Sport Management program at SHSU. His primary research interests are in sport marketing, sport consumer and fan psychology, collegiate and professional athletics, event management practices, youth sport, and psychological burnout. He has authored or co-authored 23 different publications in journals such as Sport Marketing Quarterly, Sport Management Review, the International Journal of Sport Marketing and Sponsorship, and the International Journal of Sport Management and Marketing, as well as 6 book chapters. Dr. Zapalac is also passionate about helping students achieve their goals of a career in the sport industry.