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Empirical Research Article

# eSports Fan Identity Consumer and Live Game Watching Behavior: Professional Player Fan Identity Perspective

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# Abstract

This study investigated whether the Point of attachment (POA) theory can be used to measure the consumption intention on go and watch offline eSports games. The admiration for players, social interaction, and on-site consumption requirements for viewing offline eSports competitions are prioritized. In addition, eSports fans in various regions may have distinct consumption concepts and consumption patterns. Thus, this study surveyed China (n = 156) and South Korea (n = 127) eSports fans who subjectively perceive themselves to be fans of eSports player(s) and who have observed at least one offline eSports game. The results demonstrate that player attraction and socialization have positive and significant effects on offline consumption factors. There is no correlation between previous consumption behavior and satisfaction, but dining shows a significant positive effect on satisfaction. Moreover, there is a strong relationship between satisfaction and future attendance intention. In addition, effect of eSports fan attachment on future visit intentions are measured and there is no correlation between the two variables. The front end of the path in the new model's varied between Chinese and Korean supporters. Finally, theoretical and practical implications of this study are discussed.

# Keywords

eSports; sports; point of attachment (POA); eSports tourism; sports mega events; eSports industry

# 1. Introduction

Sports industry consumption has changed as spectator sports continue to grow (Scholz et al., 2020). There are numerous ways for sports consumers to spend their discretionary funds and time (Byon et al., 2013). Although the ultimate objective of marketing model research is to predict consumer attitudes and behavioral intentions, it is also crucial to comprehend why consumers purchase particular products and services (Cohen & Warlop, 2001). Sports competitions are now closely associated with universalism, transcendence, heroism, rivalry, individual motivation, and teamwork (Rowe, 1995; Smith, 2006). With the rapid expansion of the eSports industry, an increasing number of individuals have a sustained interest in eSports competitions (Xiao, 2020). Those unfamiliar with eSports may find it challenging to comprehend this new and complex industry that combines sports, culture, technology, and business (Jenny et al., 2017; Jin, 2010). eSports is a combination of computing, gaming, media, and sporting events that is dependent on the Internet platform (Jin, 2010). The globalization of the professional sports market is crucial for the expansion of the sports industry. As emerging sports become professionalized, it is beneficial to apply proven traditional sports models to emerging sports in order to comprehend the motivations of spectators with the "new identities" (Byon et al., 2013).

Newzoo (a premier professional eSports data company) defines esports viewers as those who observe professional eSports content at least once per year. They may consist of both core eSports fans and non-core observers. Spectator motivation is a general potential component of the sports scale that applies to fans. Spectator motivation is a general potential component of the sports scale that applies to both fans and spectators. Spectator motivation suggests that consumers of sporting events can appreciate the aesthetics, drama, entertainment, pertinent knowledge, and physical performance in games (Trail et al., 2003a). These motivations have been identified by scholars as significant predictors of the consumption behavior of sports fans. Despite the fact that these scales have been widely used in traditional sports versus eSports competitions research, there is little variation between these factors of attendance decisions (Funk et al., 2009; Kim et al., 2013; Prayag et al., 2020).

Typically, products about sporting events are divided into two categories. The first is the core service, which pertains to the actual content of games. Consumption associated with competitive content is frequently attributed to market demand (Byon et al., 2013; Greenwell et al., 2002; Kim et al., 2009). The general premise of somatic psychological theory is that people are drawn to sports because they are enjoyable. The majority of these

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enjoyable spectator or fan behaviors satisfy social or psychological requirements (Robinson & Trail, 2005; Trail & James, 2001). The extended product, on the other hand, generally refers to the ancillary services associated with sporting events, such as ticket services, stadium services, game facilities, transportation, food and beverage, parking, and lodging (Mullin et al., 2007; Zhang et al., 1995). The variables related to core service elements and peripheral service quality have rarely been studied simultaneously, even though the results of these studies have demonstrated the significance of core service quality and peripheral service quality separately (Byon et al., 2013).

POA research emphasizes the multiple manifestations of attachment in sports fandom, such that fans with varying POAs exhibit distinct sport-related behaviors (Trail et al., 2003b). Current research on this theory focuses on how sports fans perceive their identities (Trail & McCullough, 2020; Trail et al., 2003b), as well as the psychological connections that fans form because they have a special bond with a team (or a player, coach, or even league, etc.) (Wann et al., 2001; Spinda et al., 2016). According to Frederick et al. (2012), after establishing this perception, sports fans typically engage in (para)social interactions with their favorite athletes on social media. Fans with a high level of attachment may seek a community that reflects their likability (Spinda et al., 2016; Kassing & Sanderson, 2010). At this point, the majority of POA's influence on sports enthusiasts has been concentrated on the traditional sports domain and what they do on social media. Spinda et al. (2016) report that the availability of the eSports realm is still seldom mentioned. Meanwhile, eSports tournaments are gaining popularity as a new form of sport tourism for eSports fans on brief or extended trips. However, in terms of offline consumption, POA theory has not received the attention that it deserves. Consequently, we believe it is necessary to investigate the offline consumption of eSports in preparation for future attendance, as well as to investigate the applicability of the "quality value - consumption paradigm" to the eSports industry and compare it through the cross-cultural comparisons (Byon et al., 2013). Although the correlation between identity and attendance has been established, there is a paucity of pertinent research on those who explicitly identify themselves as eSports fans (Laverie & Arnett, 2000). Following the foregoing logic, we would like to address the following 2 questions with this thesis:

Q1: Does POA theory apply to measuring consumption intentions related to offline eSports competitions?

Q2: Whether there are regional differences in the consumption behaviors and intentions of eSports fans?

In order to solve the problems mentioned above, the purpose of this study is to develop a new model to determine whether the attraction between "player - fan" and "fan - fan" at the core of eSports fans has a positive impact on expanding product consumption, and whether this additional consumption has a positive impact on the relationship between satisfaction with watching offline eSports tournaments and future engagement intentions. To explore the existence of geographical differences in eSports tournament culture, eSports fans from two different countries (China and South Korea) were surveyed separately.

# 2. Research Background

# 2.1 eSports

Jenny et al. (2017) proposed a comprehensive definition of eSports: eSports are organized video game competitions. The debate on whether eSports can be considered a sport can be traced back to 1999, even though the majority of scholars currently recognize eSports as a sport (Gestalt, 1999). In fact, eSports conforms substantially to the foundational definitions of eSports sociology (Guttmann, 1978) and sport philosophy (Suits, 2007). Players of eSports are intrinsically motivated to engage in this activity, and their intention is to have fun (Guttmann, 1978). Moreover, formal eSports competitions are organized, competitive, institutionalized, and followed by diverse audiences. Professional eSports athletes are responsible managed by the Governing body. They have greater technical and physical fitness than average players (generally, traditional sports emphasize gross motor skills, whereas eSports requires fine motor skills), and their competitive activities generate the required energy expenditure Energy Expenditure (EE) (Guttmann, 1978; Jenny et al., 2017; Suits, 2007).

Another crucial metric is whether eSports can be recognized by major international multi-sport competitions. In 2020, the Olympic Council of Asia (OCA) confirmed that eSports will be a medal event at the 2022 Asian Games in Hangzhou, China. Eight games, including FIFA, PUBG, Mobile and Arena of Valor, Dota2, League of Legends, Dream Three Kingdoms 2, HearthStone, and Street Fighter V, have been announced officially<sup>1</sup>. While the debate over the inclusion of eSports in the Olympic Games continues, the Asian Games of 2022 have taken a historic step by recognizing the "sports status" of eSports games (Kates & Clapperton, 2015).

# 2.2 Why Do People Go and Watch Offline Esports Games ?

As a central component of sporting events, eSports viewing motivation has been extensively discussed. Relevant research primarily focus on the consumer appeal of eSports game content (Pizzo et al., 2018; Xiao, 2020). Although motivation is linked to attendance or attendance intentions, motivation has been held responsible for the small amount of variance in some studies, including that of Funk et al. (2009). To measure and predict various aspects of sports consumer behavior, researchers have developed sports motivation scales from a variety of perspectives over the years. Early developments of sports consumer consumption scales included the Sport Fan Motivation Scale (SFMS; Wann, 1995) and Motivations of the Sport Consumer (MSC; Milne & McDonald, 1999). The Motivation Scale for Sport Consumption (MSSC) devised by Trail and James (2001) and the Sport Interest Inventory (SII) scale created by Funk et al. (2001) measure the psychological motivation of sports audiences by examining their consumption motivation. Currently, in addition to measuring traditional sports events, the scales are also used to assess the consumption behavior of eSports fans (e.g., Hamari & Sjoblom, 2017; Pizzo et al., 2018; Xiao, 2020).

The POA theory has received a lot of attention in traditional sports watching motivation research, in addition to the various consumption motivation scales. Most of the POA studies on sporting events have focused on the interactions between POA elements, the relationship between game viewing motivation and POA factors (Kim et al., 2013; Robinson et al., 2004; Trail et al., 2003b), the premise that sports fans produce different conferences/divisions or different teams of POA perception differences (Kamath et al., 2021; Spinda et al., 2016) loyalty or revisit (Kwon et al., 2005; Prayag et al., 2020). Many researchers have demonstrated that identification is an important predictor of exercise behavior (Lock et al., 2014). Attachment points represent an entity's psychological connection. And, attachment points are not just single elements or one-dimensional. Multiple perspectives or the investigation of the logical relationships between multiple attachment elements should also be considered (Kirkup & Sutherland, 2017). The research of these two scholars confirms that motivation leads to distinct attachment sites (i.e., event and location attachment), which in turn influence participants' positive attitudes toward or loyalty to the event or location. Sports fans typically experience multiple types of identification. For example, researchers have proposed the points of attachment index (PAI) --- a model for measuring POA (Spinda et al., 2016). The reaction of sports fans to these programs in

<sup>&</sup>lt;sup>1</sup> https://olympics.com/en/news/fifa-pubg-dota-2-esports-medal-events-asian-games-2022

different contexts is partly a reflection of their agreement with these POA programs (Trail et al., 2003b; Kwon et al., 2005). The model focuses on factors such as sport, level of sports play, favorite team, player or coach, conferences/divisions, and impact of the team on the whole sports community (Spinda et al., 2016; Kim et al., 2013).

Most of the previous research on sports consumption has concentrated on team sports in traditional viewing settings (Robinson et al., 2004). However, as online information dissemination capabilities continue to improve, the influence of sports star effects also trends to grow. eSports has transitioned from an Internet phenomenon to live-action mega events, while maintaining its presence by communicating with the outside world via multiple online channels (Jenny et al., 2018). Moreover, social interaction attracts spectators to sporting events (Ridinger & Funk, 2006; Wann, 2006). Social interaction provides opportunities for expanding relationships and socializing among unfamiliar sports fans, thereby enhancing their sense of belonging and social status (Fisk, 1992; Wann & James, 2018). One of the requirements for widespread new popular sports is having a sizable and diverse following (Suits, 2007). With the rise of teams, tournaments, leagues, bonuses, management, and sponsorship deals, a new culture of competitive video gaming has emerged within the eSports industry (Crawford & Gosling, 2009).

# 2.3 Consumption Behavior of eSports Fans

Numerous studies have investigated fans who actively compete in eSports (Lee et al., 2014; Hamari & Sjoblom, 2017). Much of the research focuses on the behavior of consumers who watch eSports games (Seo, 2016), comparison of eSports and traditional sports watching motivations (Lee & Schoenstedt, 2011; Pizzo et al., 2018), suitability of eSports and sports advertising (Lehnert et al., 2022), and identification level with favorite eSports teams and players (Cushen et al., 2019). Sjoblom and Hamari (2017) examined multiple eSports fan motivations as predictors of event content consumption metrics, including eSports game watching. Some motivations, such as the effect of specific emotions on motivation, cognitive and social integration, exhibited positive predictive levels, as indicated by the study's findings.

Due to the unpredictability of sports appeal, researchers believe that the aesthetic nature and presentation of sports will increase the potential appeal of sports games (Hinch & Higham, 2005). These contents provide authentic and meaningful experiences for sports fans and directly or indirectly influence the intensity of their personal investment in sports objects (Crawford, 2004; Giulianotti, 2002). Therefore, some extremely committed sports fans may devote a great deal of time and energy to watch sports events, which have been shown to generate a great deal of vigor and enthusiasm (Smith & Stewart, 2007). Additionally, papers on eSports viewing motivations emphasize the significance of the emotional experience of consumers. These elements fulfill several crucial psychological (escape, stimulation, entertainment, sense of collective honor, personal identity, national pride), social (sports anniversaries, sports atmosphere), and cultural (cultural celebration) requirements (Hamari & Sjoblom, 2017; Kim et al., 2013; Smith & Stewart, 2007; Xiao, 2020). Open Systems Theory (OST), a commonly cited open system theory in the study of sports venues, holds that the operation of sports organizations is inexorably heavily influenced by the surrounding environment (Bastedo, 2004). According to Amagoh (2008), if a sports facility wishes to retain its long-term appeal, it must combine economic, political, and social factors in order to maintain an interactive environment within the organization. Most sports facility operators design their business strategies to entice consumers to engage in activities. Consequently, with the increase in the number of sports fans visiting venues to watch eSports games, satisfying consumer needs has become a crucial service objective for sports facilities (Amagoh, 2008; Jenny et al., 2018).

# 2.4 Collective Fan Identification Differences

Personal identity and societal identity make up one's selfconcept (Tajfel & Turner, 2004). Identification is described by Trail et al. (2000) as the orientation of the self toward other things, such as an individual or group, which results in feelings or emotions of close attachment. This attachment is not exclusive to a particular group or individual. Sports fans may regard any memories associated with the sport as a point of attachment (Robinson & Trail, 2005; Trail, 2000). Experts found that a sports fan's likelihood of attending a sporting event increases with their level of optimism. They typically maintain a very stable degree of personal motivation for participation (Kim et al., 2013).

Scholars are interested in the connection between divisions as a possible area of POA research expansion. Currently, researchers identify differences between POA programs by measuring the degree of adherence of sports supporters of various teams to the accomplishments and standing of every team in the league (Smith & Stewart, 2007; Spinda et al., 2016). For instance, Spinda et al. (2016) used the seven-factor PAI model to look at how various fan identities of sports fans experience different kinds of identification as well as team loyalty. The findings demonstrate that all categories are consistent with the theoretical latent factors. According to Kim et al. (2013), it is imperative to conduct research to determine the best way to mediate the motivation-sport consumer behavior connection. They examined divisional college football teams within the context of college sports to determine if sports consumer identification levels enhance the predictive power of motivation. The findings showed that the connection between motivation to engage in physical exercise and willingness to attend is moderated by the overall structure of identification. between motivation to engage in physical exercise and willingness to attend is moderated by the overall structure of identification.

# 3. Hypothesis Development and Research Model

# 3.1 Interactivity and Consumption of eSports Fan

In addition to the appeal of game content to eSports aficionados, player-related content also plays a significant role in satisfying their psychological aesthetics (Hamari & Sjoblom, 2017). In some studies pertaining to the consumption of traditional sports competitions, a greater emphasis is placed on the physical attractiveness of the participants. These studies examine the physical attractiveness of athletes in relation to their physical performance during exercise (Trail & James, 2001). Hamari and Sjoblom (2017) devised a more pertinent explanation for physical attraction in the field of eSports in their 2017 study. They believe that although the content of eSports occurs within the realm of the electronic system, the vast majority of eSports events document the entire process of players, from pre-match to post-match interviews, on video (Brandes et al., 2008). Some prerecorded recordings, as well as the facial expressions, hand movements, and interviews of eSports players during the live broadcast, can provide fans with the opportunity to learn more about each player. The more consumers know about sports celebrities, the greater their appreciation. A sports celebrity's reputation should be based more on past performance and personal charisma than on actual game ability (Mullin & Dunn, 2002). Hausman and Leonard (1997) believed that sports stars have a unique personal appeal that allows them to pique the interest of supporters even if the team's actual competitive level has not improved significantly.

In the field of eSports, it is commonly believed that aesthetic satisfaction can be provided by players and games separately. The eSports fans are highly motivated to watch games to learn about players, teams, and eSports events (Cushen et al., 2019). Additionally, they frequently assemble a fan base on their own to back their preferred players or teams. Scholars have observed that unique experiences frequently captivate the interest of fans (Horne, 2017). These experiences may involve the participation of a star player, memorable interactions, or exhibition games (Smith & Stewart, 2007). The coaching staff, players, and referees primarily display the game's core service quality to the audience (Zhang et al., 2004). Since inter-divisional or inter-national competition involves the overall success of a league. Therefore, sports fans who have high league affiliations may also show fondness and support for teams or players representing their country in international competitions (End et al., 2002).

The experiences of sports tourists are linked to social interaction (Kim et al., 2013). The social nature of sporting events provides specific cultural communities with a meeting place (Wann et al., 1999). The locations of offline eSports competitions can be regarded as a common destination for sports enthusiasts, a meeting place, and a culturally shared space (Smith & Stewart, 2007). It's important to strengthen a feeling of belonging through social connections with others who have similar interests (Fink et al., 2002). Motivations for social interaction at sporting events reflect individuals' desires to engage with groups and to be a part of organizations with which they share similarities (Wann et al., 1999). Wann (2006) concluded in a follow-up study that a preference for a particular sport may be one of the most influential factors influencing social welfare. Identifying with a highperforming sports team and its players can also improve supporters' social connections and mental health (Reding et al., 2011; Wann, et al., 2011). Also, this effect may be amplified when a sports fan is surrounded (through family or community ties) by individuals associated with their favorite sports (Spinda et al., 2016). As a result, it is important to investigate the interaction between POA and the factors of identification-social psychological health. Social support among sports fans will become one of the factors most likely to be widely considered. Sports fans are significant competing attachments for attending sporting events, and social support among them is going to be one of the most widely considered factors. When a sports enthusiast develops a stronger attachment to an athlete, they may develop a (para)social communication relationship (Spinda et al., 2016). Therefore, the hypothesis that follows is suggested:

H1a: Player attraction has a positive impact on the socialization of eSports fans

In numerous settings, perception of value has been identified as a mediator of the relationship between service quality and behavioral intentions (Byon et al., 2013; Cronin et al., 2000; Murray & Howat, 2002). All these research findings indicate that perceived value is strongly correlated with service quality and behavioral intentions. When sports consumers hold strong attitudes toward the attributes of a game's primary product, these attitudes may result in subsequent actions (Byon et al., 2013). Trail et al. (2003a) examined the future behavior of sports consumers by measuring four variables: watching and attending future games, purchasing team memorabilia, purchasing teamlicensed products, and supporting the team. The findings indicated that these behaviors positively affect repurchase intentions and word-of-mouth. personal dispositions determine the emotional states, behavioral responses, and evaluations of individuals, which are substantially influenced by environmental stimuli (Mehrabian & Russell, 1974). Typically, Sports fans frequently pay for mementos, even though some of it is impractical or even crude (Booth & Tatz, 2000; Smith & Stewart, 2007). Currently, categories of consumer goods derived from eSports players and eSports events are expanding rapidly.

The theory of environmental psychology emphasizes that accumulated stimuli can be used to induce emotional states, influence evaluations, and direct consumer behavior (Mehrabian & Russell, 1974). As soon as a sports fan decides to observe the next game, the process of accumulating anticipation begins. Uhrich and Koenigstorfer (2009) investigated the application of environmental psychology to sporting events in a study. They believed that environment approach is a desirable behavior that demonstrates consumers' interest and preference for the environment. Sports fans desire to improve their performance and remain or return to this environment in the future. Due to the allure of sporting events, many sports fans will travel frequently and far to observe a game of interest (Wann et al., 2001). A "complicated" travel itinerary may include transportation, the natural scenery of the game location, and dining. Although the event itself is the primary reason for travel, the value-added effect of travel to and from the destination and during the stay cannot be ignored from a global perspective (Kahle et al., 1996; Smith & Stewart, 2007). The following two hypotheses are proposed:

H1b: Player attraction has a positive impact on the beforehand consumption of eSports fans

H2a: Socialization has a positive impact on the beforehand consumption of eSports fans

Numerous studies have confirmed the "halo effect" of celebrity athletes (Brizek, 2002; Kim et al., 2020). Sports starthemed restaurants, restaurant chains offering commemorative merchandise, and game-related content during events have the potential to increase restaurant attendance and attract sports enthusiasts (Brizek, 2002). In a related case study conducted by Brizek (2002), Applebee's promoted its neighborhood grill and bar theme by displaying local "heroes" or sports figures in an atrium area that represented the community. This significantly attracts followers of the sports star's team to spend money at the store. The gathering of fans in the store establishes a cultural space for offline fan communities in this instance. Fans with a stronger sense of identity are more deeply integrated into their self-concept, more likely to observe games, travel further and make other local purchases, purchase merchandise, and remain loyal (Smith & Stewart, 2007; Fink et al., 2002).

Game support/operation programs are used to describe auxiliary services during sporting events (Zhang et al., 2004). Unlike the teams that deliver the event's primary content, team management for sporting events focuses on the additional product features of the competition (e.g., ticketing services, physical and functional character of the arena or stadium and intermission facility activities) (Smith & Stewart, 2007). Although most consumers accept these additional services (some of which may be unnecessary) in order to enjoy the event's primary content, the quality of game support items frequently impacts the overall operation of sporting events (Byon et al., 2013). Researchers have suggested that the quality of peripheral services associated with game support items may influence audience consumption levels (Brooks, 1994; Zhang et al., 1998). A growing number of eSports fans are choosing to make short-distance or even long-distance travel arrangements to attend the growing number of offline eSports events. Some eSports competition locations are currently being constructed. For instance, Shanghai, China is building the Shanghai International NCC & E-sports Center, a comprehensive sports venue with the primary goal of holding eSports contests, including training venues for the entertainment department, conferences, eSports education, entertainment, and dining facilities. As such venues continue to proliferate, the higher the quality of services related to eSports tourism, the more attractive eSports destinations will be for offline consumption by eSports fans. The following two hypotheses are proposed:

H1c: Player attraction has a positive impact on the dining consumption of eSports fans

H2b: Socialization has a positive impact on the dining consumption of eSports fans

# 3.2 Satisfaction and Future Attendance Intention of eSports Event

It has been discovered that eSports event satisfaction is related to gaming contents and additional service satisfaction (Jang et al., 2020). In studies concerning traditional sports consumption, consumer contentment is defined as the customer's

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positive and gratifying reaction to the ancillary services provided during the entertainment and/or gaming of a sporting event. Service satisfaction refers to the extent to which consumers are satisfied with the services they receive at sporting events (Yoshida & James, 2010). According to studies, sporting products have a substantial effect on game enjoyment and the desire to participate in future sporting events (Kwon et al., 2005; Zhang et al., 1998). Only offline consumption provides the opportunity to experience the true ambiance (Neus, 2020). Customer perceptions of primary products and supplementary services may coexist as predictors of customer satisfaction and behavior intentions. Even previous studies have concluded that ancillary services (e.g., stadium staff) may be a more accurate predictor of customer satisfaction than primary products (Greenwell et al., 2002). Yoshida and James (2010) examined sports consumers in the United States and Japan and determined that stadium personnel and facility access are significant predictors of service satisfaction. Accessibility to stadium facilities has a positive effect on customer service satisfaction from a match management perspective. Consequently, the following two hypotheses are proposed:

H3: Beforehand consumption has a positive impact on the offline eSports game watching satisfaction

H4: Dining consumption has a positive impact on the offline eSports game watching satisfaction

Individuals' behavioral intentions are considered as an indication of their willingness to perform a specific task. Such that, the clearer an individual's intention, the more likely it is that the expected behavior will occur (Ajzen, 2005). The findings of Kwon

et al. (2005) suggested that sports fan cognition, satisfaction, and future attendance intentions can be predicted by team-related attachment. According to Trail et al. (2000), affective states are comprised of happiness and contentment. In other words, a sports fan is more satisfied after an event, the more likely he may engage in future fan behavior (Trail et al., 2003a). In the major studies, the behavioral intention of sports consumers reflects behaviors like repurchase intention and word-of-mouth communication. Scholars believe that propensity to recommend services to others and repurchase intentions are the most significant general behavioral intentions (Byon et al., 2013; Zeithaml et al., 2006). When the fundamental psychological requirements of eSports fans are satisfied, their enjoyment of the game and their desire to attendant future games are enhanced (Przybylski et al., 2010). Therefore, the following hypothesis is proposed:

H5: Offline eSports game watching satisfaction has a positive impact on the future attendance intention

In studies pertaining to eSports, behavioral factors have been discussed. Existing research has examined consumption viewing time, game time, and variables including game publishers, event organizers, and eSports teams (Hamari & Sjoblom, 2017; Ryan et al., 2006; Sjoblom & Hamari, 2017). Since revisits are influenced by the tourism location attraction. Thus, we sat an exogenous variable to explore whether the frequency of offline eSports game watching as of the survey affects future revisit intentions. The specific research model is shown in Fig. 1.



#### Fig. 1. Research model

# 4. Research Method and Analysis

# 4.1 Survey Measures

The majority items of the questionnaire's queries were adapted from previously validated multiple contents to prevent measurement inaccuracies (Churchill Jr, 1979). The survey questions included 23 items organized into 6 structures. Each item, excluding the intention to visit in the future, contains four inquiries (contains 3 questions). Queries regarding player attraction and socialization were borrowed and modified from Pizzo et al.'s (2018) study on eSports game watching. The research on sports enthusiasts' consumption for the ambiance of the scene and offline eSports competitions summarizes the majority of the project's pre-consumption behavior content (Jenny et al., 2018; Neus, 2020). Nishio et al. (2016) provided the information for the dining section. To measure satisfaction and future attendance intentions, items from Xiao (2020), Paek et al. (2021) and Trail et al. (2013) were implemented.

#### 4.2 League of Legends game

One of the most well-known eSports competitions is LOL, which draws a sizable audience (Jenny et al., 2018). On November 6, 2022, approximately 10,000 spectators congregated at the Chase Center Arena in San Francisco for the LOL 2022 Global Finals. Concurrently, the peak viewers of global online viewers reached approximately 5.15 million, while the average number of viewers reached 980,000.<sup>2</sup> Currently, millions of fans attend various venues to witness professional eSports competitions. Typically, eSports professionals are positioned in the center of the stage in front of desktop computers, live-streaming their activities to stadium screens. eSports tournaments are held all over the world, but the largest professional tournaments are held in the

<sup>&</sup>lt;sup>2</sup> https://escharts.com/tournaments/lol/2022-world-championship

United States, Western Europe, China, and South Korea (Jenny et al., 2018).

# 4.3 Data Collection

Traditional sports are extremely concerned with the extent to which sports consumers identify with their own spectator roles (Wann, 2002). This study aims to measure perceptions of eSports consumption interest and eSports fan identification. In terms of team and player, this variable refers to the degree of psychological attachment supporters have with the team or player (Wann & James, 2018). Identification levels are critical predictors of fan emotional, cognitive, and behavioral responses, according to a wide range of research (Dietz-Uhler & Lanter, 2008; Cushen et al., 2019). Current POA theory research continues to emphasize motivation and participation willingness (Ballouli et al., 2016; Kwon et al., 2005; Spinda et al., 2016). The propensity to return to both the destination and the activity has also been a topic of discussion for some academics (Kirkup & Sutherland, 2017). In actuality, however, the POA's perspective on the overall consumption behavior of sports fans (including the dining and associated goods in addition to tickets) has not been considered. Therefore, we conducted an investigation into the logical connection between motivation, consumption behavior, gratification, and future visitation intent. Considering the fact of offline eSports tournaments in Asia, the LOL leagues in China (CN) and South Korea (KR) have over a decade of experience hosting professional tournaments and a relatively established league structure. This study focuses on the eSports fans in these two nations who appreciate watching LOL matches. Considering that the new model suggested in this study is intended to assess the actions and potential future involvement of eSports fans who erroneously think that they have the status of player fans. In the screen question section before the formal initiative, three screen questions were set. (1) Have you ever attended an offline eSports game? (2) Are you familiar with the basic rules of LOL game? (3) Do you consider yourself a devotee of one or more eSports athletes? The participants in this study were chosen based on their affirmative responses to all three queries.

The construct queries consisted of 6 factors (player attraction, socialization, beforehand consumption, Dinning, satisfaction, Future attendance intention) and 1 exogenous variable (eSports Fan Attachment). All factors except future attendance intention (3 questions) consisted of 4 questions. This section utilized a 7-point Likert scale, with 1 indicating complete disagreement and 7 indicating complete agreement (Dawes, 2008). Participants were instructed to indicate their agreement or disagreement with each question. The fourth section consisted of six demographically pertinent questions: gender, country of residence, age, marital status, education, monthly income, and eSports fan attachment (first time & repeat). All of the items in the questionnaire are based on content from pertinent prior research on the English language (Xiao, 2020; Trail & James, 2001; Hamari & Sjoblom, 2017; Jenny et al., 2018; Jang et al., 2020). Due to the multilingual character of this study's respondents, the initial questionnaire was created in English. The document was then translated by two professionals who spoke English, Chinese, and Korean, respectively. The Chinese and Korean versions were then back-translated into English, and differences between English and Korean expressions were rectified. A native Korean and a Chinese speaker evaluated the content validity of the survey questions in the two translated versions.

This study was conducted with eSports fans in China (CN) and South Korea (KR) who know the basic rules of the LOL game and have been to an eSports match at least once. The survey of Korean respondents was conducted from December 5 to December 20, 2021. For Chinese respondents, the survey was conducted from January 3, 2022 to February 1, 2022. The questionnaire for this study was difficult to conduct in an offline

survey because of the pandemic. Therefore, in this study, the questionnaires for both China and Korea were conducted online. A leading market research firm Macromill Embrain (www.embrain.com) was commissioned to do the Korean part of the survey in order to obtain potential respondents in Korea, and a quota sampling method was implemented. The Chinese portion of the survey was distributed through the Wenjuanxing website (www.wenjuanxing.com) and Weibo (https://www.weibo.com), one of the most popular social media platforms in China.

We collected 1066 questionnaires in total. They were comprised of 485 Koreans and 581 Chinese individuals. The response rate was 37.4% overall. Before distributing the questionnaire, we devised screen questions and attention questions and promised to compensate respondents who completed the questionnaire thoroughly. After discarding the questionnaires that did not correspond to the study's target demographic, those that did not make sense (continuous selection of the same options, completion of all questions in 1 minute and incomplete responses more than 5 minutes) were also disregarded. With a response rate of 41.6%, 200 valid questionnaires were obtained for the Korean eSports fans. With a response rate of 34.3%, 199 valid questionnaires were collected for the Chinese eSports fans.

# 4.4 Data Analysis

# 4.4.1 Sample Characteristics

A total of 283 usable surveys were completed. Male respondents accounted for 71.4% and female respondents accounted for 28.6% of the overall sample. 55.1% of the respondents were from China and 44.9% were from South Korea. Approximately 4.9% of the respondents were 18 or younger, 21.9% between 18 and 20 years of age, 29% were between 21 and 23, and 21.9% were between 24 and 26. There are 84.8% of the respondents were single and 15.2% were married. Among the respondents, 28.6% have a monthly income of \$2,000 to \$2,999. About 36.7% of the respondents went to watch offline eSports games 2 or 3 times, 26.5% only watched offline eSports games 4 or 5 times. The respondents' detailed demographics are reported in Table 1.

**Table 1.** Demographics. (n = 283)

Variable	Content	Frequency (%)
Condon	Male	202 (71.4%)
Gender	Female	81 (28.6%)
Country of	China	156 (55.1%)
Residence	South Korea	127 (44.9%)
	18 or Younger	14 (4.9%)
	18-20	62 (21.9%)
٨٥٥	21-23	82 (29.0%)
Age	24-26	62 (21.9%)
	27-29	43 (15.2%)
	30 or Older	20 (7.1%)
Marital Status	Single	240 (84.8%)
Maritar Status	Married	43 (15.2%)
	High School Diploma or Lower	30 (10.6%)
	College School or Degree	54 (19.1%)
Education	4-year University Attending or Degree	180 (63.6%)
	Graduate School Attending or Degree	17 (6.0%)
	Doctoral School Attending or Degree	2 (0.7%)
	\$1,999 or Below	63 (22.3%)
Monthly Income	\$2,000 - \$2,999	81 (28.6%)
(In KRW or RMB)	\$3,000 - \$3,999	66 (23.3%)
	\$4,000 - \$4,999	37 (13.1%)
	\$5,000 or Above	36 (12.7%)
eSports Fan	Once	75 (26.5%)
Attachment	2-3 Times	104 (36.7%)

(First time &	4-5 Times	69 (24.4%)
Repeat)	5-7 Times	8 (2.8%)
	7 Times or More	27 (9.5%)

# 4.4.2 Measurement Model

In this study, we separately surveyed South Koreans and Chinese who had watched offline eSports games and identified themselves as fan of professional eSports player(s). We used the Partial least squares structural equation modeling (PLS-SEM) analysis to examine the proposed measurement and structural models and to test the proposed hypotheses in this study. As respondents were asked to rate all survey questions simultaneously, common methodological differences needed to be considered. Therefore, Harman's one-way test was conducted as a post hoc statistical test to confirm the presence of common method bias in the outcome dataset (Harman, 1967). An exploratory factor analysis (EFA) was conducted on all 23 measures and unrotated factor solutions were examined. In this process, the issue of common method bias arises when a single factor is present or when a factor accounts for more than 50% of the variance of a variable (Podsakoff et al., 2003). The EFA results depict six variables (eigenvalues > 1), each dimension explaining between 4.935% and 39.476% of the covariance between

Table 2. Measurement item properties

measures. Since no single factor accounted for more than 50% of the covariance, it was concluded that the measurements in this study did not have a serious problem of common method bias.

We first evaluate the measurement model by the validity and reliability of the constructs. Convergent validity assesses the strength and significance of the loadings, the average variance extracted (AVE), and the reliability estimates (Kim et al., 2011). In the analysis, all AVEs were greater than 0.50, exceeding the recommended threshold (Fornell & Larcker, 1981). Thus, these results provide strong evidence for convergent validity. Next, construct reliability was assessed by internal consistency and indicator reliability. At the same time, the satisfactory reliability in this study was achieved for all factors (Cronbach's alpha > .70). Then, internal consistency was assessed using Dillon-Goldstein's rho, the values ranging from .849 to .925 (Table 2). Finally, the Heterotrait-Monotrait ratio of correlations (HTMT), procedures superior to the commonly considered criteria (Fornell & Larcker, 1981), and cross-loading were assessed (Henseler et al., 2015). The results showed that all HTMT values for the potential variables were below the critical and conservative value of 0.85 (Table 3). The results indicate that, overall, these scales are valid and reliable measures of their respective constructs.

Construct	Items	Loading	alpha	CR	rho_A	AVE
Player attraction	I think it was exciting for me to meet eSports players in person.	0.738				
	I watched carefully when footage of eSports players appears on the screen.	0.792	0 762	0 765	0.849	0 585
	I thought the eSports players I like are more attractive than the others.	0.713	0.702	0.705	0.049	0.505
	I thought excellent eSports players look more handsome than others.	0.811				
	I enjoyed the social relationship aspect of offline eSports game watching.	0.751				
Socialization	I could share satisfaction with others when watching offline eSports games.	0.780	0.776	0 770	0.955	0 5 0 7
	I went to watch offline eSports games to meet other fans.	0.790	0.776	0.779	0.855	0.597
	I went to watch offline eSports games to meet other fans I have known online.	0.769				
Before hand consumption	I would like to buy souvenirs by the online way before watching offline eSports game.	0.753				
	I would like to buy souvenirs around the venue before watching offline eSports game.	0.795	0.910	0.819 0.827		0.645
	I would like to buy banners before the eSports game to cheer up the teams/players.	0.826	0.819			
	If necessary, I would like to reserve a place in a restaurant or hotel room around the venue before watching.	0.866				
Dining	I thought the food around the venues is easy to find.	0.866	0.002			0.755
	I think it's important to have good restaurants around the eSports venues.	0.837	0.892	0.873	0.925	0.755

	I am very concerned about whether there are tasty foods around the eSports venues.	0.862				
	I really anticipate the food and restaurants around the eSports venue.	0.909				
Satisfaction	I was satisfied with the offline eSports game watching.	0.820				
	I was pleased with the experience of offline eSports game watching.	0.863	0.855	0.856	0.902	0.697
	I think my decision to go and watch the offline eSports game was a wise one.	0.827				
	I don't think I regretted investing my time and money to watch offline eSports games.	0.828				
	I intend to go and watch the offline eSports game in the next season of League of Legends.	0.908				
Future attendance intention	I plan to go and watch the offline eSports game in the next season of League of Leagueds.	0.880	0.877	0.883	0.924	0.802
	I probably will go and watch the offline eSports game in the next next season of League of Legends.	0.899				

Table 3. Heterotrait-Monotrait ration of correlations (HTMT)

	Mean	S.D.	(1)	(2)	(3)	(4)	(5)	(6)
(1) Beforehand consumption	5.110	1.066						
(2) Dining	5.070	1.223	0.430					
(3) Player attraction	4.983	1.140	0.596	0.630				
(4) Future attendance intention	5.302	5.302	0.490	0.661	0.646			
(5) Satisfaction	5.389	5.388	0.352	0.625	0.576	0.821		
(6) Socialization	5.413	5.412	0.535	0.594	0.587	0.695	0.691	

# 4.4.3 Testing the Hypothesized Structural Model

5000 times of PLS-SEM bootstrap sampling tests were used in this study. The variance inflation factor (VIF) was used to diagnose the multicollinearity of each independent variable. The values of VIF for all items in this study ranged from 1.307 to 2.538, satisfying the requirement that the value of multicollinearity needs to be less than 10. The corrected  $R^2$  values are the explanatory power of the predictor variables for the respective structures. To verify the accuracy of the structural framework, the  $R^2$  of the variance of satisfaction (0.314) and revisit intention (0.51), located in the end part of the study model, was calculated as the predictive power. In addition to the R<sup>2</sup> analysis, Stone-Geisser's Q<sup>2</sup> values (Stone, 1974) were calculated to assess the predictive relevance of the model in this study. Q<sup>2</sup> assesses the predictive validity of the model by skipping some indicator values using the calculated parameters. The difference between the skipped data points and the predicted data points is the basis for the Q<sup>2</sup> calculation (Chin et al., 2008). A Q<sup>2</sup> greater than 0 implies that the model has predictive relevance, while a Q<sup>2</sup> less than 0 is interpreted as a lack of predictive relevance. The Q<sup>2</sup> values for all the important factors in this study ranged from 0.119 to 0.403 and were all greater than 0.

Fig. 2 shows the structural relationships assumed in this study and the results for the control variables. Among the control

variables considered in this study, most of the independent variables have a strong positive effect with the dependent variable. In terms of the results, beforehand consumption has no direct effect on the intention to the satisfaction of watching an offline eSports game (H3). Other than that, the remaining seven main hypotheses were all supported, as shown in Figure 4. The results showed that player attraction had a positive effect on the beforehand consumption (H1a:  $\beta$  = 0.353, t-value = 3.697, p < 0.001), dining (H1b:  $\beta$  = 0.363, t-value = 5.612, p < 0.001) and socialization (H1c:  $\beta$  = 0.463, t-value = 7.964, p < 0.001). The socialization of eSports fans also had a positive effect on the beforehand consumption (H2a:  $\beta$  = 0.277, t-value = 2.919, p < 0.01) and dining (H2b:  $\beta$  = 0.337, t-value = 5.022, p < 0.001). Beforehand consumption showed no significant effect (H3:  $\beta$  = 0.124, t-value = 1.458, p > 0.05) but dining (H4:  $\beta$  = 0.502, t-value = 6.855, p < 0.001) was positively influenced the satisfaction of the experience of watching the eSports game. Finally, the satisfaction was significantly influenced the revisit intention (H5:  $\beta$  = 0.714, t = 12.819. p < 0.001).

In addition, we measured the reliance of eSports fans, i.e., whether offline eSports games attachment as a separate control variable has an effect on future attendance intention. As a control variable, eSports fan attraction ( $\beta = 0.073$ , t-value = 1.221, p > 0.05) did not influence future attendance intention.



**Fig. 2.** Result of the structural model **Note:** \*p<0.05, \*\*p<0.01, \*\*\*p<0.001.

# 4.4.4 Group Comparison between China and South Korea eSports Fan

In this study, we separately surveyed Koreans and Chinese who had watched offline eSports games. In order to demonstrate that the specimens collected from two different countries (200 cases in Korea and 199 cases in China) could be analyzed together, we performed a chi-square test. The results showed  $\chi^2$  = 30.516, df = 18, and p-value = 0.33, which implies no difference between the two data sets (Cochran, 1952).

POA study also mentions interregional differences and cultural differences (Smith & Stewart, 2007; Spinda et al., 2016). During the data collection phase, two separate countries (China and South Korea) eSports fans were surveyed to investigated whether regional or cultural differences in eSports influence the path coefficient of fans with "player belief" who observe offline eSports competition models. The results of the analysis are shown in Table 4.

From the analysis results, it is evident that fans of eSports in China and South Korea exhibit distinct differences. player attraction showed positive effects on socialization ( $\beta = 0.269$ , p = 0.032, p < 0.05), beforehand consumption ( $\beta = 0.445$ , p = 0.015, p < 0.05) and dining ( $\beta = 0.335$ , p = 0.007, p < 0.01). Moreover, according to the results of multi-group analysis, the data comparing Chinese and South Korean eSports enthusiasts are all positive (+), as shown in Table 4. In other words, Chinese eSports fans on the three factors of player attraction influence presented in this study.

Table 4. The comparison result (CN vs KR) of PLS Multi-Group Analysis (MGA)

Paths (CN vs KR)	Difference  Coefficients	P-value	Results
Player attraction → Socialization	0.269	0.032*	Supported
Player attraction $\rightarrow$ Beforehand consumption	0.445	0.015*	(CN > KR)
Player attraction → Dining	0.335	0.007**	Supported (CN > KR)
Socialization $\rightarrow$ Beforehand shopping	-0.332	0.065	Not Supported
Socialization $\rightarrow$ Dining	-0.121	0.318	Not Supported
Beforehand consumption $\rightarrow$ Satisfaction	-0.208	0.227	Not Supported
Dining $\rightarrow$ Satisfaction	0.236	0.124	Not Supported
Satisfaction $\rightarrow$ Future attendance intention	-0.029	0.797	Not Supported

**Note:** \*p<0.5, \*\*p<0.01, \*\*\*p<0.001.

# 5. Conclusion

The eSports industry is obtaining increasing consumer interest. As a burgeoning industry, the current marketing model for eSports imitates traditional sports paradigms in novel and innovative ways (Scholz, 2020). However, not enough research has been conducted on the consumption of eSports fans with strong fan identity perceptions who observe offline eSports matches. This study measures the contribution of eSports fancentered attraction and interaction to offline consumption by developing a new research model based on POA theory, which has

not been extensively discussed in the eSports industry. In addition, it is investigated whether offline eSports viewing satisfaction and future participation intentions are positively influenced by consumption behavior.

Several key conclusions can be drawn from analyzing the questionnaire data. Firstly, player attraction has a positive effect on socialization. In other words, the more they perceive themselves to be fans of professional players, the greater eSports consumers' propensity to communicate and interact with others in the field. Secondly, the attractiveness of players to eSports supporters and social interactions among eSports fans have a positive effect on their pre-consumption and accommodation consumption behaviors. This implies that a high degree of identity perception can facilitate eSports fans' consumption behavior at the game site. Thirdly, it was determined that ex ante consumption behavior has no positive influence on satisfaction. This may be because individuals who perceive themselves to be fans do not need to contribute to the experience by purchasing souvenirs or cheering banners. Finally, contentment influences future viewing intentions positively. At the same time, the data suggest that eSports game exposure (i.e., the number of times they have viewed an eSports game) does not have a direct influence on future intentions to return. The intention to attend a future eSports game is not influenced by prior viewing history for either eSports fans who have only watched a single eSports match or those with extensive prior watching experience.

# 5.1 Theoretical Implications

Due to the rapid expansion of the eSports industry, an increasing number of academics are discussing this emerging field. Efforts by eSports organizers to link video game competitions to real-world consumption have not been adequately quantified and studied so far. In addition, discussions based on a clear understanding of fan identity are still woefully insufficient. This study develops and evaluates a new eSports consumption model to explore the consumption behavior of eSports consumers who perceive themselves having a player identity and observe offline matches. The model investigates the relationship between identity perceptions and consumption behaviors and the influence of these behaviors on satisfaction and future engagement intentions (including the influence of eSports supporter contact as an exogenous variable for future visits) is discussed. In addition, it is assumed that eSports consumers in various sub-divisions may have distinct community cultures and consumption patterns. This study investigates Chinese and South Korean eSports enthusiasts and compares them across multiple groups. The results demonstrated that the other paths of the model were supported and exhibited a strong correlation, except for the effect of antecedent consumption behavior on satisfaction, which was found to be insignificant. Observing the eSports fan interaction element had no discernible effect on future visitation intentions. However, there were partial differences between the consumption patterns of eSports enthusiasts in the two countries.

Focusing on esports fans' offline eSports consumption is innovative and theoretically pertinent (Neus, 2020). This research expands and supplements the extant thesis on offline eSports viewing in a variety of ways. This study investigates whether POA, an extensively discussed theory in traditional sports, can be applied to offline eSports game watching behavior. This broadens the numerous applications of POA theory (Kamath et al., 2021; Kim et al., 2013; Robinson et al., 2004; Trail et al., 2003b). In addition, the discussion on the primary and peripheral service quality at eSports tournament sites contributes to the advancement of the relevant research (Zhang et al., 2024; Zhang et al., 1995). Regarding the relationship between the elements of model, the positive effect of player attraction on socialization extends the research on eSports fan behavior (Brandes et al., 2008; Cushen et al., 2019) and sports stars adoration (Hamari & Sjoblom, 2017; Horne, 2017; Xiao, 2020). In addition, this study demonstrates that both player attraction and socialization have a positive effect on beforehand consumption behavior and dining consumption. It suggests that a fan's perception of his or her identity can influence consumption decisions. This section of the model plugs a gap in the research on offline eSports consumption (Mullin et al., 2007; Smith & Stewart, 2007; Trail et al., 2003a; Wann et al., 2001). Beforehand consumption behavior has been shown to have no direct effect on satisfaction when viewing eSports games. This result is consistent with the hypothesis proposed in the study by Jenny et al. (2018) on eSports stadiums. Future visitation intentions were positively correlated with

satisfaction and were unaffected by the previous games attendance experience. This finding extends theoretical studies related to behavioral variables (Ryan et al., 2006; Sjöblom, & Hamari, 2017). Not really much attention has been paid to the diversity of cross-cultural consumption patterns. Examining the distinctions between Chinese and South Korean eSports consumers, this study supplements related theoretical research (Byon et al., 2013; Laverie & Arnett, 2000). Lastly, this study extends the research on possible regional differences in paths induced by eSports culture and consumption habits (End et al., 2002). This study provides a novel approach for investigating the theoretical construction of offline consumption within the eSports industry.

# 5.2 Practical Implications

This study concentrates on the consumption of eSports fans for practical purposes. The findings of this research can inform the development of offline eSports competitions and the eSports tourism industry. At first, the socialization of fans is influenced by the attractions of players as the primary content provider of tournaments. This necessitates the inclusion of additional opportunities for eSports fans to interact with participants. The greater their sense of interactivity in the field, the more likely they would like to share their positive emotions with others (Cushen et al., 2019). In the case of LOL games, for instance, many regional leagues conduct audience-facing interviews with participants on stage after matches. This made fans a more direct look into the minds of the eSports players they support and extended the "player-fan" interaction beyond the game. Existing research on eSports has paid little regard to previous consumption patterns. Due to the diversification trend in the eSports industry, fan culture-related consumption has emerged as a new industry derived from eSports. There is a vast variety of cultural and creative products available for purchase. They include banners, cheering sticks, crafts, apparel, and even everyday necessities emblazoned with the logos of professional teams or players. Some fans with a strong sense of identity will buy or even collect related items. The results of this study indicate that viewing offline eSports games is not influenced by previous consumption patterns. This indicates that the purchase of retail products related to eSports tournaments, or the booking of lodging and meals close to the venue, has no direct impact on overall service satisfaction. Therefore, the development of eSports cultural and creative products may also extend beyond the concept of products related to live tournaments and be both practical and diverse.

For world-class tournament hosting and organization, eSports fans are willing to travel across town or even across the globe to attend a game of the highest magnitude. There are currently few venues available to host significant eSports tournaments, and the majority of world-class eSports competitions take place in traditional sports arenas. Several countries are in the process of constructing specialized venues to host significant eSports competitions (Jenny et al., 2018). In addition, international differences in fan consumption patterns have been confirmed. This study compares the offline spending habits of eSports enthusiasts from China and South Korea. The result affirms that various eSports cultures and fan groups have distinct consumption patterns. Consequently, a global eSports consumption market can be developed by depicting consumer profiles with diverse user characteristics for the development of targeted sales strategies. Finally, as an exogenous variable, spectator contact with eSports has been shown to have no effect on future attendance intentions. Consequently, it can be presumed that as long as the content quality and league operation model of eSports matches are ensured, offline eSports matches will consistently attract eSports fans to attend future matches regardless of their age.

# 6. Limitations and Future Research Directions

As this research was conducted during the pandemic, national pandemic prevention policies restricted the hosting of eSports tournaments to online formats. This study's respondents were eSports fans who had previously observed offline eSports games. Depending on the amount of time it has been since they viewed their most recent eSports tournament, some respondents may not recall or be able to provide accurate responses. In the future, when the frequency and attendance of offline eSports tournaments return to pre-pandemic levels, every effort should be made to preserve a fresh and accurate representation of the experience at the time of the survey (Byon et al., 2013). In addition, due to the time and financial constraints of the survey, this study selected Chinese and South Korean eSports enthusiasts from two of Asia's more developed eSports industries and cultures. In future research, the model can be used to measure eSports fans in other regions, such as Europe and the Americas, to investigate more disparate consumption differences among eSports fans.

The rapid growth and development of the eSports industry would attract more investors. There is still ample room for the innovation of offline eSports consumption or eSports tourism development orientation. The attachment to sports venues is a potential factor that warrants additional empirical study in the future (Spinda et al., 2016). Moreover, the perception of a sports supporter's identity is not limited to the player fan perceptions discussed in this study. The team perception is also one of the most frequently mentioned factors in recent research on the identity perceptions of sports fans (e.g., Spinda et al., 2016; Cushen et al., 2019). In future research, a comparative analysis of fan identity perceptions of similar but distinct items could be considered. Future study might also look into whether other more granular antecedents (e.g., event organizers, event participant experiences, crowd management, etc.) influence willingness to watch a game dependent on the type of event organization (Kirkup & Sutherland, 2017). By analyzing specific visitor motivations, marketing managers can develop targeted marketing communications, which are bound to have a positive effect on repeat visitor behavior. Based on the spending habits of eSports fans in various regions, it is even possible to develop personalized eSports tourism products.

The perception of fan identity is one of the focal points of POA-related studies, and we also discuss the behavioral differences between fans in two countries, China and Korea, in this paper. However, the fan identity might not be fixed. For instance, an eSports fan adores A player in team 1. He considers himself a "big fan" of A and watches as many Team 1 offline games as feasible. But when player A transfers to team 2, he will likely stop purchasing team 1 tickets or even home season tickets and commit to a fan of team 2. Of course, he might also have other choices. In general, however, we believe that followers' perceptions of their own identity and level of investment in maintaining that identity are unstable and influenced by numerous objective factors. Future studies may also be capable of utilizing more nuanced categorization and diverse analysis methods. "Nationality" is merely one of the identities of eSports fans. Additionally, "hometown pride" associated with teams, home games, leagues, and even regional teams and colleges may influence the consumption patterns of sports fans (Anderson & Fulton, 2008). In future studies, it may be more accurate to infer the spending patterns of gaming fans if two-dimensional or even multi-dimensional data are collected, and gamers are classified more precisely.

# **Declaration of competing interests**

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# References

- Ajzen, I. (2005). *Attitudes, personality, and behavior* (2nd ed.). Milton-Keynes: Open University Press/McGraw-Hill.
- Amagoh, F. (2008). Perspectives on organizational change: systems and complexity theories. *The Innovation Journal: The Public Sector Innovation Journal*, 13(3), 1–14.
- Anderson, D. H., & Fulton, D. C. (2008). Experience preferences as mediators of the wildlife related recreation participation: Place attachment relationship. *Human Dimensions of Wildlife*, 13(2), 73-88.
- Ballouli, K., Trail, G. T., Koesters, T. C., & Bernthal, M. J. (2016). Differential effects of motives and points of attachment on conative loyalty of Formula 1 US Grand Prix attendees. Sport Marketing Quarterly, 25(3), 166-181.
- Bastedo, M. N. (2004, April 28). Open systems theory. Sage: Encyclopaedia of Educational Leadership Administration.
- Booth, D., & Tatz, C. (2000). *One-eyed: A view of Australian sport*. [Location]: Allen & Unwin.
- Brandes, L., Franck, E., & Nüesch, S. (2008). Local heroes and superstars: An empirical analysis of star attraction in German soccer. *Journal of Sports Economics*, 9(3), 266–286.
- Brizek, M. G. (2002). Case Study: Biting into the Core of the Casual Dining Restaurant Segment Applebee's International Inc. Journal of Foodservice Business Research, 5(4), 111-134.
- Brooks, C. M. (1994). Sport marketing: Competitive business strategies for sport. Englewood Cliffs, NJ: Prentice-Hall.
- Byon, K. K., Zhang, J. J., & Baker, T. A. (2013). Impact of core and peripheral service quality on consumption behavior of professional team sport spectators as mediated by perceived value. *European Sport Management Quarterly*, *13*(2), 232–263.
- Byon, K. K., Zhang, J. J., & Connaughton, D. P. (2010). Dimensions of general market demand associated with professional team sports: Development of a scale. *Sport Management Review*, *13*, 142–157.
- Churchill Jr, G. A. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16(1), 64–73.
- Cochran, W. G. (1952). The  $\chi^2$  test of goodness of fit. The Annals of Mathematical Statistics, 315-345.
- Cohen, J.B., & Warlop, L. (2001). A motivational perspective on means-end chains. In T. J. Reynolds & J. C. Olson (Eds.), Understanding consumer decision making: The means-end approach to marketing and advertising strategy (pp. 389–433). Mahwah, NJ: Lawrence Erlbaum Associates.
- Crawford, G. (2004). Consuming sport: Fans, sport and culture. Routledge.
- Crawford, G., & Gosling, V. K. (2009). More than a game: Sports-themed video games and player narratives. *Sociology of Sport Journal, 26*(1), 50–66.
- Cronin Jr, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193–218.
- Cushen, P. J., Rife, S. C., & Wann, D. L. (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.
- Dietz-Uhler, B. E. T. H., & Lanter, J. R. (2008). The consequences of sports fan identification. In L. W. Hugenberg, P. M. Haridakis, A. C. Earnheardt (Eds.), Sports mania: Essays on fandom and the media in the 21st century (pp. 103–113). Jefferson, NC: McFarland & Company Inc. Publisher.
- End, C. M., Dietz-Uhler, B., Harrick, E. A., & Jacquemotte, L. (2002). Identifying with winners: Sport fans' tendency to spontaneously BIRG. *Journal of Applied Social Psychology*, 32(5), 1017–1030.
- Fink, J. S., Trail, G. T., & Anderson, D. F. (2002). An examination of team identification: Which motives are most salient to its existence? *International Sports Journal*, 6(2), 195.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. https://doi.org/10.2307/3151312
- Frederick, E. L., Lim, C. H., Clavio, G., & Walsh, P. (2012). Why we follow: An examination of parasocial interaction and fan motivations for following

athlete archetypes on Twitter. *International Journal of Sport Communication*, *5*, 481-502.

- Funk, D. C., Filo, K., Beaton, A. A., & Pritchard, M. (2009). Measuring the motives of sport event attendance: Bridging the academic-practitioner divide to understanding behavior. *Sport Marketing Quarterly*, 3(18), 126–138.
- Funk, D., Mahony, D. F., & Nakazawa, 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.
- Gestalt. (1999, December 13). *The OGA: What the hell is it?* Eurogamer. http://www.eurogamer.net/articles/oga
- Giulianotti, R. (2002). Supporters, followers, fans, and flaneurs: A taxonomy of spectator identities in football. *Journal of Sport and Social Issues*, *26*(1), 25–46.
- Greenwell, T. C., Fink, J. S., & Pastore, D. L. (2002). Assessing the influence of the physical sports facility on customer satisfaction within the context of the service experience. *Sport Management Review*, 5(2), 129–148.
- Guttmann, A. (1978). From ritual to record: The nature of modern sports. Columbia University Press.
- Hamari, J., & Sjöblom, M. (2017). What is eSports and why do people watch it? *Internet Research*, *27*(2), 211–232.
- Hausman, J. A., & Leonard, G. K. (1997). Superstars in the National Basketball Association: Economic value and policy. *Journal of Labor Economics*, 15(4), 586–624.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Horne, J. (2017). Sport in consumer culture. Bloomsbury Publishing.

- Jang, W. W., Kim, K. A., & Byon, K. K. (2020). Social atmospherics, affective response, and behavioral intention associated with esports events. *Frontiers in Psychology*, *11*, 1671.
- Jenny, S. E., Keiper, M. C., Taylor, B. J., Williams, D. P., Gawrysiak, J., Manning, R. D., & Tutka, P. M. (2018). eSports venues: A new sport business opportunity. *Journal of Applied Sport Management*, 10(1), 8.
- Jenny, S. E., Manning, R. D., Keiper, M. C., & Olrich, T. W. (2017). Virtual (ly) athletes: Where eSports fit within the definition of "Sport." *Quest*, 69(1), 1-18.
- Jiang, K., Luk, S. T. K., & Cardinali, S. (2018). The role of pre-consumption experience in perceived value of retailer brands: Consumers' experience from emerging markets. *Journal of Business Research, 86*, 374–385.
- Jin, D. (Ed.). (2010). ESports and television business in the digital economy. In *Korea's online gaming empire* (pp. 59–79). Cambridge, MA: MIT Press.
- Kahle, L. R., Kambara, K. M., & Rose, G. M. (1996). A functional model of fan attendance motivations for college football. *Sport Marketing Quarterly*, 5, 51-60.
- Kamath, G. B., Ganguli, S., & George, S. (2021). Attachment points, team identification and sponsorship outcomes: Evidence from the Indian Premier League. *International Journal of Sports Marketing and* Sponsorship, 22(3), 429–452.
- Kassing, J. W., & Sanderson, J. (2010). Fan-athlete interaction and Twitter tweeting through the Giro: A case study. *International Journal of Sport Communication*, 3, 113-128.
- Kates, A., & Clapperton, G. (2015). The debate: For & against e-sports. Engineering & Technology, 10(1), 28.
- Kim, D., Ko, Y., Lee, J. L., & Kim, Y. C. (2020). The impact of CSR-linked sport sponsorship on consumers' reactions to service failures. *International Journal of Sports Marketing and Sponsorship*, 21(1), 70-90.
- Kim, M. J., Chung, N., & Lee, C. K. (2011). The effect of perceived trust on electronic commerce: Shopping online for tourism products and services in South Korea. *Tourism Management*, 32(2), 256–265. https://doi.org/10.1016/j.tourman.2010.01.011
- Kim, M. K., Zhang, J. J., & Ko, Y. J. (2009). Dimensions of market demand associated with Taekwondo schools in North America: Development of a scale. *Sport Management Review*, 12(3), 149–166.
- Kim, Y. K., Trail, G. T., & Magnusen, M. J. (2013). Transition from motivation to behaviour: Examining the moderating role of identification (ID) on the relationship between motives and attendance. *International Journal* of Sports Marketing and Sponsorship, 14(3), 35–56.
- Kirkup, N., & Sutherland, M. (2017). Exploring the relationships between motivation, attachment and loyalty within sport event tourism. *Current Issues in Tourism*, 20(1), 7-14.
- Kwon, H. H., Trail, G. T., & Anderson, D. S. (2005). Are multiple points of attachment necessary to predict cognitive, affective, conative, or behavioral loyalty? Sport Management Review, 8(3), 255–270.
- Laverie, D. A., & Arnett, D. B. (2000). Factors affecting fan attendance: The influence of identity salience and satisfaction. *Journal of Leisure Research*, *32*(2), 225–246.
- Lee, D., & Schoenstedt, L. J. (2011). Comparison of eSports and traditional

sports consumption motives. ICHPER-SD Journal of Research, 6(2), 39-44.

- Lee, J. Y., An, J. W., & Lee, S. W. (2014). Factors affecting eSports audience satisfaction-The case of League of Legends. *Journal of Korea Game Society*, 14(3), 35–46.
- Lehnert, K., Walz, A., & Christianson, R. (2022). The booming eSports market: A field day for fans. *Journal of Business Strategy*, 43(2), 122–128.
- Lock, D., Funk, D. C., Doyle, J. P., & McDonald, H. (2014). Examining the longitudinal structure, stability, and dimensional interrelationships of team identification. *Journal of Sport Management*, 28(2), 119-135.
- Mehrabian, A., & Russell, J. A. (1974). An approach to environmental psychology. The MIT Press.
- Milne, G. R., & McDonald, M. A. (1999). Sport marketing: Managing the exchange process. Sudbury, MA: Jones and Bartlett Publishers.
- Mullin, B. J., Hardy, S., & Sutton, W. A. (2007). *Sport marketing* (3rd ed.). Champaign, IL: Human Kinetics.
- Mullin, C. J., & Dunn, L. F. (2002). Using baseball card prices to measure star quality and monopsony. *Economic Inquiry*, 40(4), 620–632.
- Murray, D., & Howat, G. (2002). The relationships among service quality, value, satisfaction, and future intentions of customers at an Australian sports and leisure centre. *Sport Management Review*, *5*(1), 25–43.
- Neus, F. (Ed.). (2020). Differences and similarities in motivation for offline and online eSports event consumption. In *Event marketing in the context of higher education marketing and digital environments* (pp. 79–99). Wiesbaden: Springer Gabler.
- Paek, B., Morse, A., Kim, M., & Jung, H. (2021). Sport consumer flow and shopping well-being in online shopping. *International Journal of Sports Marketing and Sponsorship*, 22(4), 721–736.
- Pizzo, A. D., Na, S., Baker, B. J., Lee, M. A., Kim, D., & Funk, D. C. (2018). eSport vs. Sport: A Comparison of Spectator Motives. *Sport Marketing Quarterly*, 27(2), 108.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879
- Prayag, G., Mills, H., Lee, C., & Soscia, I. (2020). Team identification, discrete emotions, satisfaction, and event attachment: A social identity perspective. *Journal of Business Research*, 112, 373–384.
- Przybylski, A., Rigby, C. S., & Ryan, R. (2010). A motivational model of video game engagement. *Review of General Psychology*, *14*(2), 154–166.
- Reding, F. N., Grieve, F. G., Derryberry, W. P., & Paquin, A. R. (2011). Examining the team identification of football fans at the high school level. *Journal of Sport Behavior*, 34(4), 378–391.
- Ridinger, L., & Funk, D. C. (2006). Looking at gender differences through the lens of sport spectators. Sports Marketing Quarterly, 15(3), 155–166.
- Robinson, M. J., & Trail, G. T. (2005). Relationships among spectator gender, motives, points of attachment, and sport preference. *Journal of Sport Management*, 19(1), 58–80.
- Robinson, M. J., Trail, G. T., & Kwon, H. (2004). Motives and points of attachment of professional golf spectators. *Sport Management Review*, 7(2), 167–192.
- Rowe, D. (1995). *Popular cultures: Rock music, sport and the politics of pleasure.* SAGE Publications Ltd.
- Ryan, R. M., Rigby, C. S., & Przybylski, A. (2006). The motivational pull of video games: A self-determination theory approach. *Motivation and Emotion*, 30(4), 344–360.
- Scholz, T. M. (2020). Deciphering the World of eSports. *International Journal on Media Management*, 22(1), 1–12.
- Seo, Y. (2016). Professionalized consumption and identity transformations in the field of eSports. *Journal of Business Research*, 69(1), 264–272.
- Sjöblom, M., & Hamari, J. (2017). Why do people watch others play video games? An empirical study on the motivations of Twitch users. *Computers in Human Behavior*, 75, 985–996.
- Smith, A. (2006). Tourists' consumption and interpretation of sport event imagery. *Journal of Sport & Tourism*, 11(1), 77–100.
- Smith, A. C., & Stewart, B. (2007). The travelling fan: Understanding the mechanisms of sport fan consumption in a sport tourism setting. *Journal* of Sport & Tourism, 12(3–4), 155–181.
- Spinda, J. S., Wann, D. L., & Hardin, R. (2016). Attachment to sports conferences: An expanded model of points of attachment among professional, collegiate, and high school football fans. *Communication & Sport*, 4(3), 347–362.
- Suits, B. (2007). The elements of sport. *Ethics in Sport, 2*(3), 9–19.
- Tajfel, H., & Turner, J. C. (2004). The social identity theory of intergroup behavior. In J. T. Jost & J. Sidanius (Eds.), *Political psychology* (pp. 276– 293). Psychology Press.
- 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.

- Trail, G. T., Anderson, D. F., & Fink, J. S. (2000). A theoretical model of sport spectator consumption behavior. *International Journal of Sport Management*, 1(3), 154–180.
- Trail, G. T., Fink, J. S., & Anderson, D. F. (2003a). Sport spectator consumption behavior. Sport Marketing Quarterly, 12(1), 8–17.
- Trail, G. T., & McCullough, B. P. (2020). Marketing sustainability through sport: Testing the sport sustainability campaign evaluation model. European Sport Management Quarterly, 20(2), 109-129.
- Trail, G. T., Robinson, M. J., Dick, R. J., & Gillentine, A. J. (2003b). Motives and points of attachment: Fans versus spectators in intercollegiate athletics. *Sport Marketing Quarterly*, 12(4), 217–227.
- Uhrich, S., & Koenigstorfer, J. (2009). Effects of atmosphere at major sports events: A perspective from environmental psychology. *International Journal of Sports Marketing and Sponsorship*, 10(4), 56–75.
- Wann, D. L. (1995). Preliminary validation of the sport fan motivation scale. Journal of Sport & Social Issues, 19(4), 377–396.
- Wann, D. L. (2006). Understanding the positive social psychological benefits of sport team identification: The team identification-social psychological health model. *Group Dynamics: Theory, Research, and Practice, 10*(4), 272.
- Wann, D. L., & James, J. D. (2018). Sport fans: The psychology and social impact of fandom. Routledge.
- Wann, D. L., Brewer, K. R., & Royalty, J. L. (1999). Sport fan motivation: Relationships with team identification and emotional reactions to sporting events. *International Sports Journal*, *3*(2), 8–18.
- Wann, D. L., Melnick, M. J., Russell, G. W., & Pease, D. G. (2001). Sport fans: The psychology and social impact of fandom. Routledge.
- Wann, D. L., Waddill, P. J., Polk, J., & Weaver, S. (2011). The team identification-social psychological health model: Sport fans gaining connections to others via sport team identification. *Group Dynamics: Theory, Research, and Practice, 15*(1), 75.
- Warm, 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.
- Xiao, M. (2020). Factors influencing eSports viewership: An approach based on the theory of reasoned action. *Communication & Sport*, 8(1), 92–122.
- Yoshida, M., & James, J. D. (2010). Customer satisfaction with game and service experiences: Antecedents and consequences. *Journal of Sport Management*, 24(3), 338–361.
- Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2006). Services marketing: Integrating customer focus across the firm. McGraw-Hill/Irwin.
- Zhang, J., Kim, M. J., & Koo, C. (2023). How to measure the intention of watching offline eSports games: From the eSports fan-centric perspective. Asia Pacific Journal of Information Systems, 33(1), 227–260.
- Zhang, J. J., Pease, D. G., Hui, S. C., & Michaud, T. J. (1995). Variables affecting the spectator decision to attend NBA games. *Sport Marketing Quarterly*, 4(4), 29–39.
- Zhang, J. J., Pease, D. G., Smith, D. W., Wall, K. A., Saffici, C. L., Pennington-Gray, L., & Connaughton, D. P. (2004). Spectator satisfaction with the support programs of professional basketball games. In B. G. Pitts (Ed.), *Sharing best practices in sportmarketing* (pp. 207–229). Morgantown, WV: Fitness Information Technology.
- Zhang, J. J., Smith, D. W., Pease, D. G., & Lam, E. T. (1998). Dimensions of spectator satisfaction toward support programs of professional hockey games. *International Sports Journal*, 2(2), 1–17.

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