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Master's Thesis of Global Sport Management

Perceived Images of Esports and their Effects On Its Content Consumption

e-Sports 의 인지된 이미지와 콘텐츠 소비에 미치는 영향

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Perceived Images of Esports and their Effects

On Its Content Consumption

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Abstract

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With limited research in esports, comes the recognition of the need for studying it more in this interactive digital communication era. The study explored different perceptions of esport genres and how they influence consumption of esport contents from regular internet viewers and enthusiasts around the world. The paper further investigated perceptions attached to each of the chosen genres of Multiplayer Online Battle Arena, Sport simulation, Tactical shooters and Card games. Esport consumption discussed in this paper is based on spectatorship rather than esport gamers preference.

The study employed the theory of perception and image which alludes that image can be defined as the product of perception. In this sense, while the concept of perception covers both the perceiving process and its result, image solely means the outcome of this process. Therefore, image theory is focused on outcome of perception. Results of the current study indicated that acquisition of knowledge and enjoyment of aggression were significantly associated with watching esport on the four discussed genres. While other variables were not significant, socialization showed to have a small positive influence in consumption of esport across all genres. On examining perceptions attached to these genres, acquisition of knowledge was the only predictor that was the same across all four genres, while other perceptions were spread across. The study further alludes for more in-depth study of other aspect such as gambling on esport, which has recently become popular in traditional sport.

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Table of Contents

List of Tables

List of Figures

Chapter 1. Introduction

The study on electronic sports (esports) is an emerging field. Therefore, the research is rare and dispersed (Hamari and Sjöblom 2017). Compared to research studies about traditional sports viewership, it has been developed (James, Kolbe, & Trail, 2002). However, due to the concept of esports still being explored, research on esport spectatorship is limited possibly due to its short market history (Weiss & Schiele, 2013) and

Due to this limited research, there is need for further empirical studies of esports not only in spectatorship but different geographical contexts around the world (Llorens, 2017).

1.1. Research Context

Of recent, virtual games termed esport, have enjoyed global espousal with droves of people devoted to spending time watching others play computerized games through live internet broadcasts known as streams. These streams include Twitch, YouTube, Twitter and recently Facebook has become a hub of streaming and watching of these video games. Twitch has the largest viewership base and statistics on the hours spent watching top ten esport

games on the stream totaled 57.3 million hours in the month of January (Newzoo, 2021).

Although there is still ambiguity to esport description, it has noticeable growth. With America and Asia leading this new advancement, South Korea has become a major hub of esport leading its fruition. In 2012 when esport gained its growth, South Korea had more than 430 professional esports players (Wattanapissit et al., 2020).

Game developments, high-speed internet convenience and perceived images play a pivotal role in the viewing experience, leading to a great erraticism in user behavior and from inception, some of the streams have spearheaded consumer participatory to make sure they are not left out. These live-broadcasting nature of video game streaming, has also created room for unique relationship between the media creator and media, thus facilitating communication between the two (Hamari and Sjöblom, 2016)

Research on sports consumption and spectatorship is universally focused on what motivates to people consume it, how they consume it, as well as what kinds of needs the given form of media or technology might gratify (Hamari & Sjöblom, 2016).

In relation to the growth of esport that is enjoying worldwide adoption especially in Asia, Europe and USA, this research seeks to check progress on what people think about esport and to what degree it has an influence on consuming esport

1.2. Research Significance

The current literature shows that many studies have not been conducted on the perceived images of esport and the effect that they have on consumption of esport. Llorens (2017) alluded those empirical studies of esports in different geographical contexts around the world are vital and hence the study is being conducted. Generally, esports incorporate vast platforms, from personal computers to gaming consoles and genres including sport-themed games such as FIFA Online 3, and real-time strategy (RTS) games, such as StarCraft II (Seo & Jung, 2014) and not much research has focused on esport genres but rather esport as a general subject.

1.3. Research Aims

- The purpose of this study is to investigate perceived images of esport and their effect on its content consumption

- It will further examine different perceptions attached to each of the four genres of esport (card games, multiplayer online battle arena, sport simulation and tactical shooters)

1.4. Research Questions

- RQ1. How perceived images influence esport viewership in four genres of card games, multiplayer online battle arena, sport simulation and tactical shooters?

- RQ2. What are the different perceptions attached to each of the four genres of esport?

Chapter 2. Review of Literature

2.1. Defining Esports

From the late 2010's esports has been enjoying implementation across the globe. Even though there is still ambiguity to its definition, this conundrum on esports consideration as not "sport" has been drawn from different perspectives, the main argument being that player competence cannot be measured since esports athletes do not endure any physical activity.

Different qualitative literatures have emerged with few definitions, the oldest coined by Wagner (2006) describes esports as an area of sport activities in which people develop and train mental or physical abilities in the use of information and communication technologies. Hamari and Sjöblom (2017) referred to this definition as being explicit and leaving too much room for interpretation and therefore not solving the question of what sporting activities can be defined to be either an electronic sport or traditional sport. When concocting their own definition of esports, the main focus was deeply on defining what constitutes the "e" in esports and they have defined esports as competitive amateur and professional video gaming that is often coordinated by different leagues, ladders and tournaments, where players customarily belong to teams or associations which are sponsored by various

business organizations, (Hamari & Sjöblom, 2017). On their argument they added that esports such as dance, drain players physically due to interactions with the computer (Hamari and Sjöblom 2017). The International Esports Federation, defines esports competitive sports where gamers use their physical and mental abilities to compete in various games in a virtual and electronic environment.

2.2. Esport Spectatorship

Spectating gives people who watch esports the in-game experience, but are not direct participants in the game. Spectating in any sports is similar. Esports contents are consumed by watching live streams on different internet platforms and in addition to watching these live feeds, spectators show their support and cheering for their teams and general social interaction in the form of chat features. Because these are electronic sports, they are computer mediated and therefore there is need to watch the live events from a computer output such as cellphone, video screen or monitor.

2.3. Genres in Esports

Esports incorporate vast platforms, from personal computers to gaming consoles and genres including sport-themed games such as FIFA

Online 3, and real-time strategy (RTS) games, such as StarCraft II (Seo & Jung, 2014.)

Real Time Strategy: This genre places the player in an all-controlling position. The player controls a myriad of units, buildings, and other strategies that they can choose from. The player builds and controls an army of units, and pits their units against the units of another player/team. This focuses on gathering and managing a variety of resources, and figuring out the best ways of using them against an opponent in real time, i.e., all the players play at the same time, and it is not turn based.

Multiplayer Online Battle Arena: Commonly known as MOBA. These games are a subcategory of Real Time Strategy games, but they gained so much popularity to an extent that they branched out to be a solo genre and became the largest genre within esports. Most of its elements are similar to that of RTS, with the exception that the player does not control all the units of their team, instead the player control one particular unit throughout the duration of the match and other players control different units of the same team and acting together to achieve a common goal.

First Person Shooter: commonly abbreviated as FPS This genre is comprised of players controlling one character, and the display shows the world view from the perspective of the player. The player only sees what is in front of the character, and many times, the hands or weapons of the character. Although the first-person view can be applied to shooter games as well as melee-based combat games, only shooters seem to have made it into the recognized esports status.

Sport Simulation: This genre, from its name, it consists of simulation games of existing sports such as Football, Basketball, Cycling and others. The player controls the whole team or an individual player in simulation like cycling.

Card Games: Strategic games where players compete through playing cards

2.4. Perceived Images

Perceived images in this discussion refers to the perception constructs by spectators towards esports. Relative studies have found out that behavior is relatively associated with content consumption of esports.

2.4.1 Different perceptions of esports

International Olympic Committee

The Olympic Virtual Series (OVS) made its debut as part of the Tokyo 2020 Olympics which ran from the 13 May to 23 June 2021. Its main purpose is to connect the physical sporting world with the virtual and simulation sports gaming community, providing an opportunity to engage with the Olympic Movement.

The IOC President Thomas Bach said,

The Olympic Virtual Series is a new, unique Olympic digital experience that aims to grow direct engagement with new audiences in the field of virtual sports. Its conception is in line with Olympic Agenda 2020+5 and the IOC's digital strategy. It encourages sports participation and promotes the Olympic values with a special focus on youth**.**

Sports simulation genre consisting of baseball, cycling, rowing had players contesting under (Olympics website).

Olympic Council of Asia

The 2022 Asian games have also publicized that esports will be a medal event. Esport Insider reported on September 8, 2021 about the decision

of the Olympic Council of Asia (OCA) to include esports, to the official programme at the 2022 Asian Games in China.

 League of Legends**,** Hearthstone**,** Dota 2 and Street Fighter V are among the eight titles named for esports games that will debut as an official medal sport at the Games (Esport Insider, 2021)

Positive, negative and unique images of esport

Positive images in this context refers to good perceptions about esports assumed to be favorable and helping improve the mental well-being of individuals, make them feel good, improve their problem solving, skill development and promote socialization. Witkovski (2012) alludes that recent esports have sports personality, which is competition, physical fitness and interaction. He further states that this personality act as a positive social culture beyond the realm of games. Samueli foundation, in the United States of America perceives esport as a Trojan horse to grow student's communication skills, collaboration, creativity and problem-solving skills (Williams, 2020). Having established an initiative called the North American Scholastic Esports Federation (NASEF), it has schools in 49 states and over 10, 000 participants. NASEF does not use esport as competition medium but

scholastic- project based with the curriculum designed to allow participants to run esport teams during classroom learning and gaming only after school.

In contrast, negative images are associated with perceptions of watching esport for reasons believed not to be good for one's mental or physical being. Such reasons involve gambling, appreciating aggression and provocative reasons. Passion within the esports industry has been growing profusely, as much as the ubiquity of toxicity within esports has become more mainstream in recent years. Esports are agnostic, they are believed to have negative mental, physical and societal effects (Nielson & Krhulahti, 2017). In Thailand, negative consequences of this development, has been associated with young people's dependence on gadgets, change in their consciousness and attitude and increase their unreadiness to live in the real world.

Parry (2019) argues that esport does not contribute to the development of the whole human as it lacks non- physicality and this deliberation relates to the belief that video gaming promotes the anathema to athletic competition (Bowman & Cranmer, 2019).

Unique images are those not regarded as either negative or positive, but mostly perceived as just being for entertainment.

2.5 Determinants for Esport Consumption

Media content research is primarily focused on the motivations of why people consume it, how they consume it, as well as what kinds of needs the given form of media might gratify (Hamari & Sjöblom, 2 016).

Within the realm of media research, affective motivations have been shown to impact use in the contexts of esports. Esports as a type of sporting event has in recent years successfully attracted millions of spectators to the host cities either in person or through live-streaming platforms. For example, in 2018, the League of Legends (LoL) World Championship, which is by far one of the most followed esport event had 100 million viewers compared to Super Bowl which had 98 million on both YouTube Live and Twitch combined (Kim & Kim, 2020).

With various reasons attached to esports consumption, the estimated growth of this platform is forecasted to grow steadily between both occasional viewers and enthusiasts (New Zoo, 2021).

Figure 2. 1

Revenue Forecast for Esport Consumption

Global Games Market Forecast
Forecast Toward 2024

$144.4Bn — 2019
$177.8Bn — 2020
$175.8Bn — 2021
$218.7Bn — 2024

+8.7%
Total Market CAGR 2019-2024

Our revenues encompass consumer spending on games: physical and digital full-game copies, in-game spending, and subscription services like Xbox Game Pass. Mobile revenues exclude advertising. Our estimates exclude taxes, secondhand trade or secondary markets, advertising revenues earned in and around games, console and peripheral hardware, B2B services, and the online gambling and betting industry.

Source: ©Newzoo | Global Games Market Report | June 2021
newzoo.com/globalgamesreport

Motivation in the context of sport has been considered as a process encouraging sports fans' participative behaviors because they entail both psychological and social needs that brings enjoyment and socialization (Kim & Kim, 2020). Previous studies have shown that sports fans who watch certain sport have different motives and expected outcomes from watching the game or match, therefore this is an indication that different people have different reasons for consuming sport. Funk and James (2001) established the Psychological Continuum Model (PCM) focusing on motives of sport

spectatorship. This model, which consists of social opportunities, drama, vicarious achievement, entertainment value and excitement, has been widely used as a driver of sport consumption decisions. Moreover, recent development on the study have extended to other aspects, such as extrinsic and intrinsic motivations and psychological and social connections to determine what drives sports fans to watch a game or match.

Trail et al (2011) conducted a study on why spectators watched sporting events. The outcome revealed factors of aesthetics, achievement (feeling good when the team did well), drama, escape (as an escape from life), knowledge (learning about the game), physical skills, social, and family.

Positive motives for esports consumption

Vicarious achievement refers to sympathizing and co-living with people and characters in media and in the sports context, with the achievements of teams and players (Trail et al., 2000). It is a highly recognized as a strong social component and as such, it relates closely to feeling a sense of community and belonging with the players and teams the spectator is rooting for. Achievement can also be defined as viewer's sense of relatedness to a team or player when the team or player wins (Wann, Schrader & Adamson, 1998).

Trail and James (2001) state that vicarious achievement refers to how the spectator feels about the achievements of their teams and players. Usually, experiencing achievement along with the team or player is easier if spectators are more easily able to identify with a team or player (Funk & James, 2006). Hamari and Sjöblom (2017) notes that esports athletes can be more easily approachable than their counterparts in traditional sports because they have more interaction with their fan base. For example, many of the most popular esports stars are active streamers and use their social media accounts very actively and there is a wide range of interconnected social practices within esports which transcend traditional roles and interactions (Seo & Jung, 2016).

Sports fans vicariously relate themselves with the victory of a sports team or athlete for a purpose of maintaining or enhancing their self-images (McDonald, Milne & Hong, 2002). Studies on sports spectatorship and participant markets have indicated that achievement was positively associated with the viewership of all types of sports (baseball, basketball, bowling, football, tennis)

The beauty inherent in sports games referred to, as aesthetics has been positively correlated with sports consumption. Stylistic sports, such as figure skating and gymnastics, are often the ones that attract viewership through

artistic beauty in an athlete's movements (Wann, Grieve, Zapalac & Pease, 2008). Findings revealed that aesthetics is a key motivator differentiating stylistic sports consumption motivations from the others. From their research, the measurement scores for aesthetics motivation to watch figure skating and gymnastics were much higher than the scores of the same constructs for non-stylistic sports.

A game with well-designed graphics has a high chance of providing spectators with an aesthetically appealing experience in esport. Also, a player who controls the with high skill and executes a movement can trigger visually appealing special effects. Thus, the viewers of esports games who have seen such visual effects may find the experience aesthetically satisfying, and the viewers may perceive esports games that provide them such experience in a positive way (Min Xiao, 2020).

For traditional sports, visual elements have been proven to be important factors for the motivation to spectate and according to Wann and Wilson (1999) affective motions have also been shown to have an effect on the consumption of video games.

The degree of interaction between friends and family as part of spectating sports may significantly affect the intention to use media content (Wann et al., 2003). Socializing with peers has been shown to be of great importance in traditional sports as it acts as remedy and meeting place (Dietz-Uhler, Harrick, End & Jacquemotte 2000). This has extended to also playing and watching esports and other video games (Hamilton, Garretson & Kerne, 2014). Even though esport take place in virtual worlds we can assume that the spectator bonds are created through computer mediated means. Esports spectating platforms has designated chats where spectators can also interact and share their thoughts, make friends, cheer their teams and favorite players and just socialize in general.

According to a study conducted on Twitch viewers, they regarded the streaming platform as the "virtual third place" where they socialize and exchange information with other fans of the game who share a similar social identity. Viewers use chat rooms to converse, laugh, and joke with each other about content they are watching. Chat rooms foster sociability, with regular viewers and moderators playing specific roles in welcoming and engaging newcomers. Thus, live-stream environments are places for meeting new people, a common motivator for participation in online communities

(Hamilton, Garretson & Kerne, 2014). Also, the sense of community includes experiences of membership, influence, fulfilment of needs, and belonging to the channel, streamer, and other participants influence. Live- stream viewers can have their membership needs fulfilled by participating in community success and sociability. Shared experiences and continued participation in live-streams helps to develop connectedness with other stream participants and fosters a sense of community in the channel. (McMillan & Chavis, 1986).

This suggests that live-stream viewers are attracted to channels where they feel noticed, important, and social interaction, in the context of media research has shown to be of great importance (Whiting & Williams, 2013). In this time of technological advancements, it is arguable to say that various services through which esports are consumed, different social groups and actors coexist in one space, each possibly performing separate action exist (Woerman & Kirschener, 2015). People may also participate in online communities to compensate for a lack of community in real life and online communities can be particularly beneficial for the psychological well-being of participants who lack external support from their family, friends, and local community (Bargh & McKenna, 2004). Online social interactions have been reported to reduce loneliness by presenting low-risk opportunities for self-

disclosure, online social support, and involvement (Lemmens, Valkenburg & Peter, 2009).

Online interaction also helps individuals with social anxiety, who find it hard to socialize (Mazalin & Klein, 2008). Live-stream environments can provide low-threat alternatives to real life socializing, removing barriers socially anxious individuals may experience in real life.

Another aspect is acquisition of knowledge defined as the degree to which media consumption enables one to acquire information about a specific type of sports. Learning the information of a specific team or player is cognitive motivation for some spectators to watch traditional sports and Gantz and Wenner (1995) emphasize that, this information is shared in conversations or discussions about the sports (Karp & Yoels, 1990). In the context of esports, video game streaming has shown to be playing a pivotal factor in terms of knowledge acquisition through social media (Whiting & Williams, 2013) and internet use (Papacharissi & Rubin, 2000). Findings from viewers of StarCraft (a real-time strategic esports game) live event suggested that the need for information is in high demand among viewers of StarCraft, and there is a symbiotic relationship between involvement and understanding about the game (Cheung & Huang, 2011).

Traditional sport has two cognitive motivations for spectating: learning from teams and players, and gathering information to be shared in conversations (Hamari & Sjöblom 2017). Whereas in an ice-hockey match, one watches how the professional player skates or shoots, in esports one watches how the player executes a skill combination for a character or how the player rotates around the game map to optimize their impact during the game. According to Hamilton, Garretson and Kerne (2014) knowledge acquisition has been proved to be an important factor within video game watching.

Another example is by James, Kolbe and Trail (2002) who surveyed 507 season ticket holders of a new Major League Baseball franchise to examine what motivated the group of sports fans to watch baseball matches. The results of the study suggested that acquisition of knowledge was an important driver for fans who had a strong psychological connection with the team and who purchased season tickets. On one research conducted on esport platforms (Reddit, Facebook, Twitter) and other game-related forums, the acquisition of knowledge was found to be one of the positive predictors of esports viewership. This indicates that, for esports viewers, watching esports games is a way to acquire information about teams or players and learn their

ways of play (Hamari & Sjöblom, 2017). Learning and information seeking has been shown to be an integral motivator for usage in several online media contexts (Hamilton et al., 2014).

Watching esport gives spectators a chance to escape from their daily life problems (Kim &Kim, 2020). Escapism is described as a degree to which sports enables individuals to escape from day-to-day routines, and provides a distraction from everyday activities. Escapism has long been associated with video games as a consumption motivator given that video gaming experience is usually very immersive (Yee, 2006), playing or even watching others play video games (watching esports matches) is good distraction for individuals to help them forget about difficulties and unhappiness in life (Hamari and Sjöblom 2017). Unlike other forms of emotional motivations, it is not fully dependent actual outcome of the game (Wann et al., 2008). Therefore, esports may be rather similar in terms of providing a means of escape as other forms of media and sports.

Kim and Ross (2006) alluded that in their research, escapism was the second most important factor for playing and watching video games. Compared to traditional sports, esports offers even better potential for escape,

due to the fact that esports are broadcast live every day and currently, all the broadcasts are free for spectators to watch.

Another factor that has been associated sport viewership is the admiration and appreciation of player skills. Most people watch sport because they would love to see their favorite player displaying their skills. Milne and McDonald (1999) state that an appreciation of player skill has shown to be an impactful motivational factor in watching sports.

Viewing the players involved in the game, has shown to also be a factor motivating people to spectate sports, if they find players physically attractive (Duncan & Brummett, 1989). While video game players have been anecdotally believed to be physically unfit and unkempt young men, many top esports athletes are often in fact physically fitter than the average person. Many esports players' interviews reflect the belief commonly held in the esports scene that physical fitness and activity stimulates and maintains cognitive facilities and hand-eye coordination.

In traditional sports the professional players possess a skill level far beyond the average hobbyist and these skills have been found to be a significant motivator for the consumption of sports. Hence, many sports

followers admire their skills and dream about similar skill levels. Esports is no different; in order to be a professional, players must work hard in order to develop skills that enable them to compete at a highest level. Previous research has found that the majority of esports spectators appreciate and admire the skills of the professional esports players given that many esports consumers also play the same games that they spectate (Seo & Jung 2016).

Physical attractiveness in the video gaming context refers to the degree to which the spectators who are viewing the players involved in the game and finding them physically attractive (Hamari & Sjöblom 2017). They allude that one could assume that the players' appearance would not be important, because most of the events show the actual players to a fairly limited degree with attention instead focused on gameplay. However, there are also events where the players are well-presented, such as pre- and post-match interviews and social media content, which exposes players to the audience. Additionally, esports organizations nowadays have personal trainers for their players to help them live a heathy life style and perform better. Attendance at live events in particular has been shown to be significantly associated with appreciation of physical attractiveness (Sjöblom,

Macey & Hamari 2019) considering the amount that players are shown on broadcasts in esports compared to traditional sports.

Negative motives for sports/esports consumptions

Online gambling is common in the sporting world. Gamblers can choose any site on which to gamble. Some video games offer the purchase of virtually randomized items that use real-world money called "loot boxes." Items received from the loot boxes may help customize game characters to become more attractive or progress in the game. These loot boxes are associated with problem gambling.

Unique motives for sport/esports consumption

The drama construct is described as the enjoyment of uncertainty and dramatic turns of events in media content such as sports. Studies have shown that drama plays a huge role in contributing to sport viewership in general (Peterson & Raney, 2008). Since most of the esports emulate traditional sport, viewing experience has also been attached to the uncertainties presented in this context. Many esports games have added elements of randomness and information asymmetry built into them, thus further increasing the notion of

24

uncertain outcomes (Cheung & Huang, 2011). This element therefore makes people eager to know what will happen in the end. Sometimes, the result of the match cannot be determined until the very last minute. Uncertainty about which side would win the game generates suspense (Bryant & Comisky 1982) and the suspense elapse once the outcome of the match or game is certain. (Knobloch-Westerwick, David, Eastin, Tamborini & Greenwood, 2009). This uncertainty and ability of traditional sports and esports to bring an element of suspense also reflects the similarity between the two in their competitive nature (Brown, Billings, Murphy, & Puesan, 2018).

A study was carried out using the suspense theory to investigate the formation of perceived suspense in college football games and the results indicated that positive affect (excitement and joyfulness) and negative affect (frustration and angriness) influenced the level of suspense a spectator of the game experienced when the person's favorite team was winning or losing (Knobloch-Westerwick et al., 2009).

Entertainment and information seeking have been previously identified as important motivators for consuming streaming services (Cheung & Huang, 2011). An important aspect of streaming is to provide an entertaining media experience. The most popular Twitch live-streams host

esport tournaments and professional gamer streams which allow viewers to watch and learn from the best players in the world.

Entertainment has also been accompanied by novelty. Novelty defines the excitement and joy that is brought to spectators when they see new players and teams in the sporting scene and is regarded as one of the main factors of sports consumption (Trail & James, 2001). Esports as an evolving concept especially those that simulate traditional sport like FIFA, seems to enjoy great influx of spectators and continues to grow.

Prior research has indicated a relationship between gaming intention and purchase intention (Hamari, 2015). The financial successes of F2P have resulted in the mass adoption of the business model across the video game industry, while particular monetization techniques such as in-game currencies and items have been incorporated into many retail titles (Macey & Kinnunen 2020). With this finding being reinforced through the significant positive associations between time spent playing games and money spent on game-related purchases (Sjöblom, Hassan, Macey, Törhönen, & Hamari, 2020). Both cognitive and affective motivations contribute to the practices of consumption, with gameplay-related factors such as social inter- action,

unobstructed play, economic rationale and cosmetic appearance strongly associated with in-game purchases (Cai, Wohn & Freeman, 2019).

Similarly, little research exists which examines the specific relationships between watching esports and purchase intention for games, however, the limited body of existing work has shown a positive association between the two (Fernandes, 2018). It is likely that increased spectating of esports will make players more likely to make in-game purchases very early on, even before they have actually played the game, as they are exposed to content featuring more advanced players and game play. Likewise, it is possible that resultant continuous esports playing has a positive effect in making purchases in the video game, either as a means of progressing within the game, or for demonstrating individual achievements and game capital, such as via cosmetic items (Cai, Wohn & Freeman 2019).

2.6 Theoretical Framework

Figure 2. 2

The Perception and Image Theory Model

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                    ┌─────────────────────────┐
                    │      Esport Genres       │
                    └─────────────────────────┘
                                 │
                    ┌─────────────────────────┐
          ┌─────────│     Perceived Images     │─────────┐
          │         └─────────────────────────┘         │
          │                      │                       │
┌─────────────────┐   ┌─────────────────┐   ┌─────────────────┐
│ Positive Images │   │ Negative Images │   │  Unique Images  │
└─────────────────┘   └─────────────────┘   └─────────────────┘
          │                      │                       │
┌─────────────────┐   ┌─────────────────┐   ┌─────────────────┐
│    Vicarious    │   │   Enjoyment of  │   │      Drama      │
│   achievement   │   │    aggression   │   │   Originality   │
│    Aesthetics   │   │     Physical    │   │                 │
│ Social          │   │  attractiveness │   │                 │
│   interaction   │   │     Gambling    │   │                 │
│  Acquisition of │   │                 │   │                 │
│    knowledge    │   │                 │   │                 │
│     Escapism    │   │                 │   │                 │
└─────────────────┘   └─────────────────┘   └─────────────────┘
          │                      │                       │
          └──────────┐ ┌─────────────────┐ ┌────────────┘
                     │ │   Viewership    │ │
                     └─┴─────────────────┴─┘
```
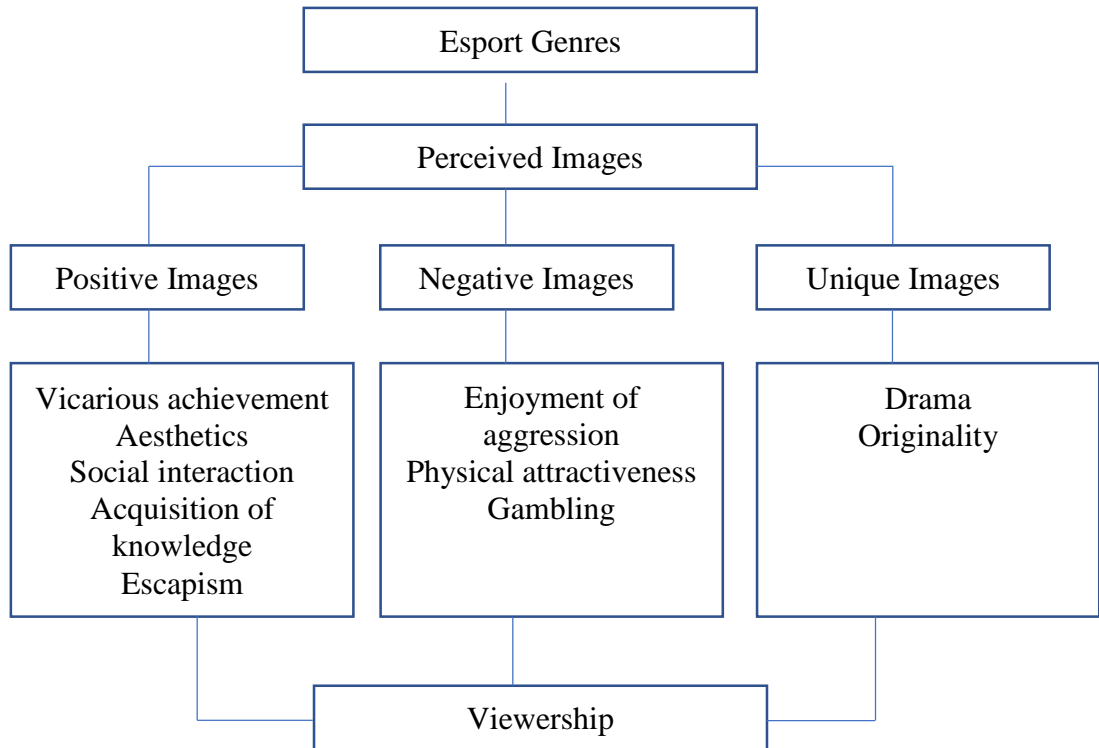
The perception and image theory implies that image can be defined as the product of perception. In this sense, while concept of perception covers both the perceiving process and its result, image solely means the outcome of this process. Therefore, image theory is focused on outcome of perception. (Ametbek, T. 2017)

By analyzing the image of state, A in state B, it is possible to predict the behavior of state B towards state A. The main proposition of the image theory is that "behavior depends on the image. Thus, if we analyze the images of esport we can definitely predict the outcome in terms of the viewership.

The main proposition of the Image theory is that behavior depends on the image. Thus, consumption of esport is determined by the images that people develop towards it.

The theory is used to explain the perception and consumption relationship. i.e., How perception influence consumption of the afore mentioned esport genres.

Chapter 3. Methods

The quantitative method was employed for this research. It was suitable because the study aimed to create a general understanding of perception that influences consumption behavior of esports across different populations. Quantitative studies are often focused, scientific and relatable. Findings from this method can be generalized if the process is well designed and the test sample is an appropriate representation of the population being studied.

Comparison analysis was done between perceived images and the influence to have on consumption of esports as well as perceptions between genres of esports. The good thing about comparison analysis is that it focuses on study groups that are pre-existing rather than created for the study and the focus is the effect of an independent variable on a dependent variable.

The method also allows the researcher to build into existing knowledge, develop concepts and generates hypothesis if possible (P Wylleman et al., 2004).

3.1 Data

Data for this study was gathered via an online survey administered amongst people who watch esports on the internet. Before administering the survey, it was piloted (n=20) in order to acquire both feedback on whether taking the survey presented any problems to the respondents. No major problems were observed in the pilot study concerning the measurement of perceived images.

According to the estimates the respondents arrived to the survey from the following websites: 80-85 percent Amazon Mechanical Turks, 10-15 percent Facebook, 5-10 percent Twitter and other sites. These numbers are based on estimates because the link shared did not have frequency tracking. Participatory incentive, was gifted to the participants (worth USD 0.50) for those who answered the survey in through Amazon Mechanical Turk.

3.2 Sampling

Simple random sampling under probability sampling was used for the research as it was open to anyone. According to Shadish et al (2002) random sampling ensures that results obtained from the sample should approximate what would have been obtained if the entire population had been measured. It ensures that units of the population had an equal opportunity to be chosen.

The advantages of this method are that minimal knowledge of the population is required, the internal as well as external validity is high and it is easy to analyze data (Acharya et.al., 2013). Because it approximates what would have been obtained if the entire population had been measured, the method therefore allows for generalizability.

3.3 Instrument

A survey consisting of demographics, familiarity and main questionnaire was used in gathering data. The survey accepted responses from November 1st to November 25, 2021. It consisted of open-ended questions on nationality, education level, salary income, hours spent playing esport and hours spent watching esports as well as familiarity. The main questionnaire used the 7 Likert point scale measuring from "weak to very strong". 1 represented weak while 7 represented very strong.

Table 3. 1

		Frequency	Percent
Gender	Male	214	57.7
	Female	157	42.3
	Total	371	100.0
Age	18-24	47	12.7
	25-34	208	56.1
	35-44	87	23.5
	45 and over	29	7.8
	Total	371	100.0
Nationality	Africa	63	17.0
	Asia	108	29.1
	Europe	34	9.2
	Australia	1	.3
	North America	135	36.4
	South America	25	6.7
	Central America	3	.8
	Antarctica	2	.5
	Total	371	100.0
Education	Less than High school	5	1.3
	High school	68	18.3
	Bachelor's degree	215	58.0
	Master's degree	77	20.8
	PhD	6	1.6
	Total	371	100.0

Salary ($)	Less than 100	42	11.3
	100-200	33	8.9
	200-300	49	13.2
	300-400	68	18.3
	400-500	59	15.9
	500 and over	120	32.3
	Total	371	100.0

The frequency of watching and playing esports sports was also collected as part of the demographics for the study and presented in the tables below.

Table 3. 2

Showing the Frequency and Percentage of Watching Esports

		Frequency	%
Watching time	Less than 1 hour	49	13.2
	1-2 hours per day	62	16.7
	2-3 hours per day	34	9.2
	3-4 hours per day	30	8.1
	Over 4 hours per day	196	52.8
	Total	371	100.0

Table 3. 3

Showing the Frequency and Percentage of Playing Esports

		Frequency	%
Playing time	Less than 1 hour	39	10.5
	1-2 hours per day	85	22.9
	2-3 hours per day	34	9.2

3-4 hours per day		28	7.5
Over 4 hours per day		185	49.9
Total		371	100.0

Familiarity with either of the specified four genres of esport was also examined using the instrument. Six constructs of familiarity were highlighted and made mandatory to the participants to answer them before proceeding to the main questionnaire. Table 4 shows the familiarity constructs.

Table 3. 4

Familiarity Constructs Definitions, Items and Coding

Construct	Coding	Items	Definitions
Familiarity 1	FAM 1	1	Familiarity with playing games in the genre
Familiarity 2	FAM 2	1	Enjoyment from watching games in the selected genre
Familiarity 3	FAM 3	1	Familiarity with rules and regulations of watching games in the selected genre
Familiarity 4	FAM 4	1	Familiarity with subscribing of purchase of games in the selected genre
Familiarity 5	FAM 5	1	Familiarity with trends in the selected genre
Familiarity 6	FAM 6	1	Familiarity with players in the genre

A list of constructs was made under each main image and best three other synonyms were chosen for the main survey.

Table 3. 5

Showing Perceived Images Constructs, Coding and Definitions

Construct	ID	Item	Description
Vicarious Achievement	VA	3	Co-living with the achievements of teams and players, the spectator is attached to
Aesthetics	AES	3	The appreciation of the beauty and gracefulness inherent in the game
Social Interaction	SOC	3	The enjoyment related to meeting, mixing and chatting while watching the game
Acquisition of Knowledge	KNO	3	The degree to which knowledge is acquire through watching the game, its strategies and other technical aspects
Escapism	ESC	3	The degree to which watching a game acts as distraction from everyday routines
Physical Attractiveness	ATTR	3	The degree to which watching the spectator finds the players physically attractive
Enjoyment of Aggression	AGGR	3	The enjoyment derived from watching aggressive behavior of athletes
Gambling	GAM	3	Taking risks by betting in order to gain monetary reward

Drama	DRA	3	The enjoyment related to uncertainty and dramatic turn of events in the
Originality	ORI	3	The enjoyment and excitement of watching games with unique concept, freshness of aspect, design and style

Viewership of esport was the dependent variable.

Sources: Adapted from Trail and James (2001), Trail (2012)

3.4 Procedure

Before taking the survey, the respondents were informed that all the information supplied will be held in confidence and all the data will be safely stored with the researcher and only used for the purpose of the study.

Data received was screened to ensure accuracy. Some of the data that was not appropriately recorded by the respondents in the opened ended questions was removed. Race as an independent variable was also removed from survey because it seemed to bring confusion most of the participants as they confused it for Nationality.

As a quantitative study, data was thereafter coded using numbers so that it would be easily calculated by the IBM SPSS data analyzing tool.

37

3.5 Validity and Reliability

The coded data was run through IBM SPSS (version 26) to check for the validity and reliability of the survey instrument. The Cronbach Alpha was employed, which is suitable to measure internal consistency, that is, how closely related sets of variables are as a group.

Table 3. 6

Showing results of reliability test

Reliability Statistics	
Cronbach's Alpha	N of Items
.910	37

3.6 Data Analysis

3.6.1 Multiple Linear Regression Analysis (MLR)

To address RQ1: How perceived images influence esport viewership in four genres of card games, multiplayer online battle arena, sport simulation and tactical shooters

Multiple Linear regression simply known as multiple regression was used to analyse data. It is a statistical technique that uses several explanatory variables to predict the outcome of a response variable therefore it was the best suited method to find out how much perceived image constructs predict watching esports. The Beta (β) value and Sig. ($p < 0.5$) were the main focus

to determine the significance and association between the predictor variables

and dependent variable.

Table 3. 7

Showing Multiple Linear Regression Results

Variables	B	Std. Error	Mean	Sig
Esport viewership (DEPENDENT)	1.966	.377	2.53	.001
POSITIVE IMAGES				
Vicarious Achievement				
Accomplishment	.075	.058	5.10	.199
Satisfaction	-.002	.055	5.33	.975
Great realization	-.034	.058	5.35	.559
Aesthetics				
Pleasing	.053	.059	5.59	.372
Beautiful/artistic	-.063	.057	5.39	.269
Pleasant	-.022	.065	5.54	.737
Socialization				
Making friends	.029	.054	5.24	.593
Interaction	.036	.055	5.49	.513
Building relations	.061	.055	5.22	.275
Acquisition of Knowledge				
Intellectual	-.140	.049	5.13	.004
Improves strategical thinking	.007	.059	5.71	.900
Improves learning	-.053	.054	5.31	.328
Escapism				
Escape from reality/fantasy	-.094	.057	5.65	.101
distraction from day-to-day activities	.068	.055	5.53	.214
NEGATIVE IMAGES				
Aggression				
Rough	.079	.052	4.12	.127

Violent	.089	.049	4.20	.050
Intimidation and hostility	.000	.043	3.94	.994
Attractiveness				
Sex appeal	.000	.050	3.47	.993
Seductive	.000	.057	3.49	.994
Physically attractive	-.068	.046	3.87	.141
Gambling				
Betting	.051	.050	4.16	.303
Risky	-.058	.049	4.10	.236
Illegal activities	-.057	.041	3.58	.170
UNIQUE IMAGES				
Drama				
Intense	.033	.039	4.15	.402
Uncertainty	-.019	.042	4.57	.650
Unpredictable	-.025	.042	4.99	.553
Originality				
Unique	-.004	.056	5.22	.948
Innovative	.035	.062	5.33	.571
Novelty	.070	.057	5.33	.215

3.6.2 Analysis of Variance (ANOVA) with Scheffé Test

To address RQ2: What are the different perceptions attached to each of the four genres of esport?

Analysis of Variance (ANOVA) was used to analyze the data for RQ2, examining perceptions in four selected esport genres. It works by analyzing the levels of variance within the groups through samples taken from each of them.

Therefore, it was employed as the suitable method to find out whether there are differences in means between groups and also find out if they are statistically significant. In calculating mean difference, we also employ the Scheffé test when there are three or more groups to determine whether individual means differ, or whether an average one group of means differs from the average of another group of means.

ANOVA results are shown table 8 and Scheffé results are shown in figure 2 to figure 11 as well as graph plotted to show grouping according to means.

Table 3. 8

Anova Results

		df	Mean Square	F	Sig.
Vicarious Achievement	Between Groups	3	6.271	5.100	.002
	Within Groups	367	1.230		
	Total	370			
Aesthetics	Between Groups	3	4.781	4.407	.005
	Within Groups	367	1.085		
	Total	370			
Socialization	Between Groups	3	4.321	3.035	.029
	Within Groups	367	1.424		
	Total	370			
Knowledge	Between Groups	3	.586	.426	.735
	Within Groups	367	1.376		
	Total	370			
Escapism	Between Groups	3	8.018	5.927	<.001

	Within Groups	367	1.353		
	Total	370			
Aggression	Between Groups	3	29.078	13.027	<.001
	Within Groups	367	2.232		
	Total	370			
Attractiveness	Between Groups	3	29.582	9.223	<.001
	Within Groups	367	3.207		
	Total	370			
Gambling	Between Groups	3	14.080	4.403	.005
	Within Groups	367	3.198		
	Total	370			
Drama	Between Groups	3	9.183	4.520	.004
	Within Groups	367	2.031		
	Total	370			
Originality	Between Groups	3	10.256	7.012	<.001
	Within Groups	367	1.463		
	Total	370			

Table 3. 9

Showing Scheffé Results of Mean Differences between Groups in Vicarious Achievement

Esport genre	N	Subset 1	Subset 2
Card games	74	4.855855855855855	
Sport simulation	126	5.240740740740742	5.240740740740742
Multiplayer Online Battle Arena.	99		5.383838383838382
Tactical shooters	72		5.527777777777778
Sig.		.153	.401

Figure 3. 1

Showing mean plots of Vicarious Achievement against Esport Genres
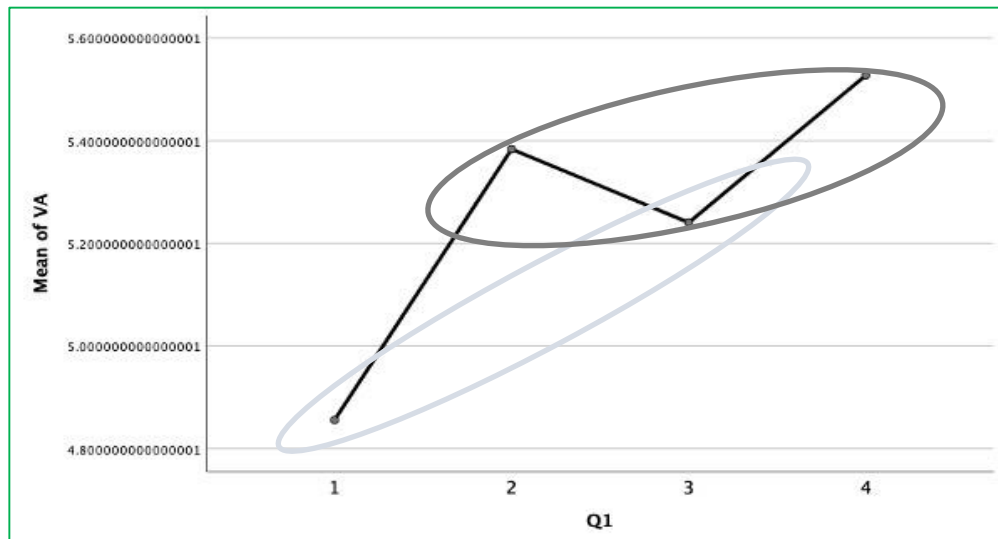
Table 3. 10

Showing Scheffé Results of Mean Differences between Groups in Aesthetics

Esport genre	N	Subset 1	Subset 2
Card games	74	5.126126126126127	
Sport simulation	126	5.441798941798944	5.441798941798944
Tactical shooters	72		5.638888888888889
Multiplayer Online Battle Arena.	99		5.656565656565656
Sig.		.259	.600

Figure 3. 2
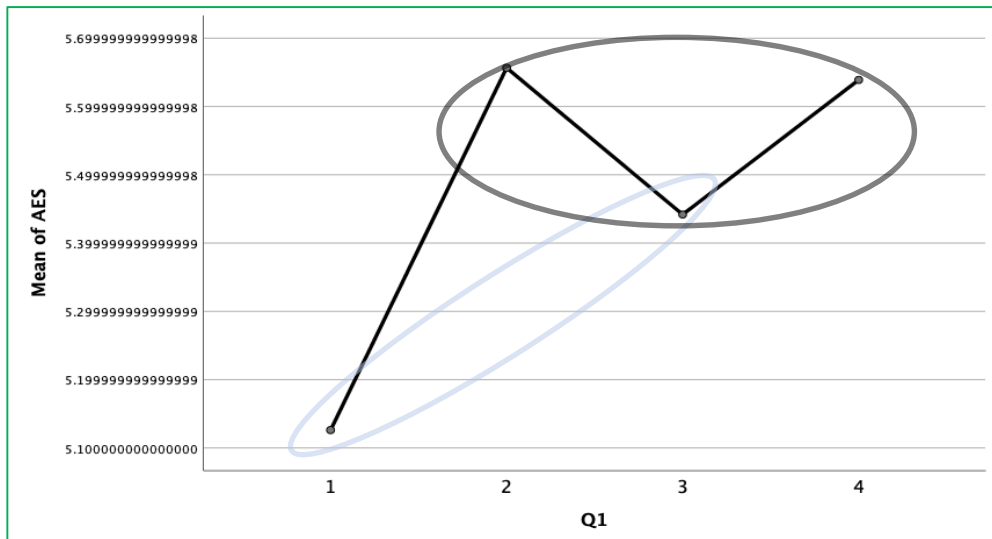
Showing mean plots of Aesthetics against Esport Genres

Table 3. 11

Showing Scheffé Results of Mean Differences between Groups in Socialization

Esport genre	N	Subset 1	Subset 2
Card games	74	4.950450450450449	
Multiplayer Online Battle Arena	99	5.377104377104379	5.377104377104379
Sport simulation	126	5.386243386243386	5.386243386243386
Tactical shooter	72		5.486111111111111
Sig.		.120	.947

Figure 3. 3

Showing mean plots of Socialization against Esport Genres
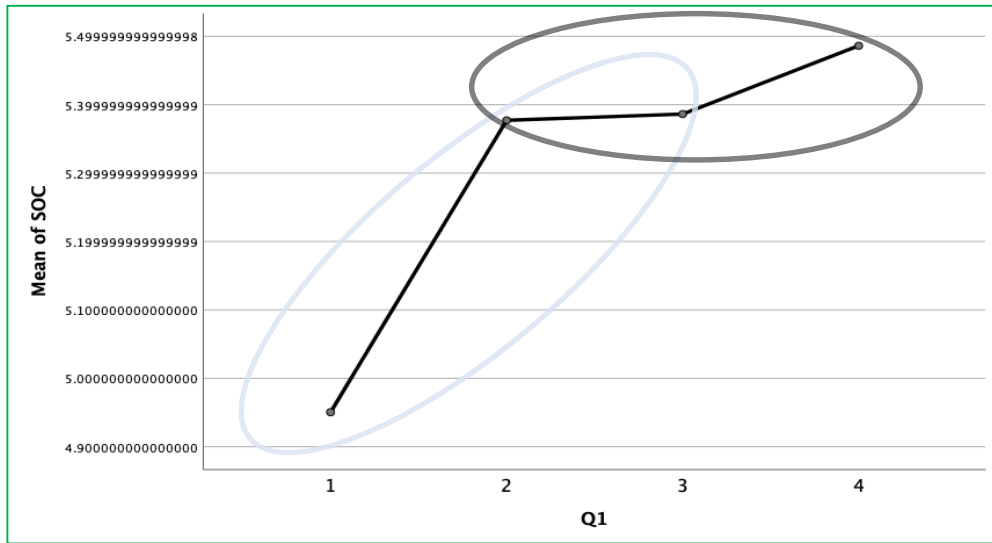
Table 3. 12

Showing Scheffé Results of Mean Differences between Groups in Knowledge

Esport genre	N	Subset 1
Sport simulation	126	5.320105820105821
Card games	74	5.324324324324325
Tactical shooters	72	5.439814814814817
Multiplayer Online Battle Arena.	99	5.471380471380470
Sig.		.866

Figure 3. 4
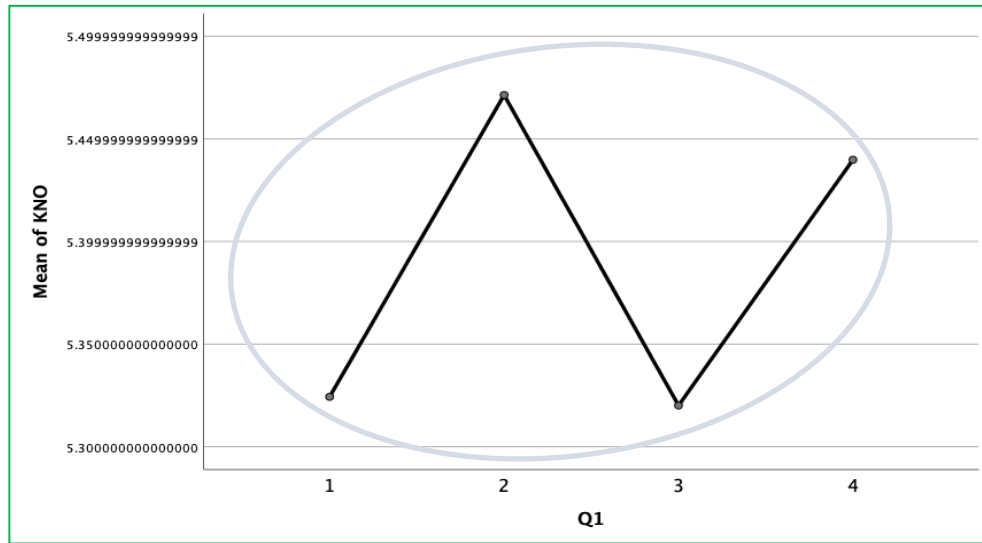
Showing mean plots of Knowledge against Esport Genres

Table 3. 13

Showing Scheffé Results of Mean Differences between Groups in Escapism

Esport genre	N	Subset 1	Subset 2
Card games.	74	5.288288288288289	
Sport simulation	126	5.383597883597884	
Multiplayer online Battle Arena.	99	5.717171717171716	5.717171717171716
Tactical shooters	72		5.990740740740740
Sig.		.104	.471

46

Figure 3. 5

Showing mean plots of Escapism against Esport Genres

Table 3. 14

Showing Scheffé Results of Mean Differences between Groups in Aggression

Esport genre	N	Subset 1	Subset 2
Card games	74	3.139639639639641	
Sport simulation	126		4.193121693121692
Tactical shooters	72		4.370370370370372
Multiplayer online Battle Arena.	99		4.457912457912457
Sig.		1.000	.710

Figure 3. 6

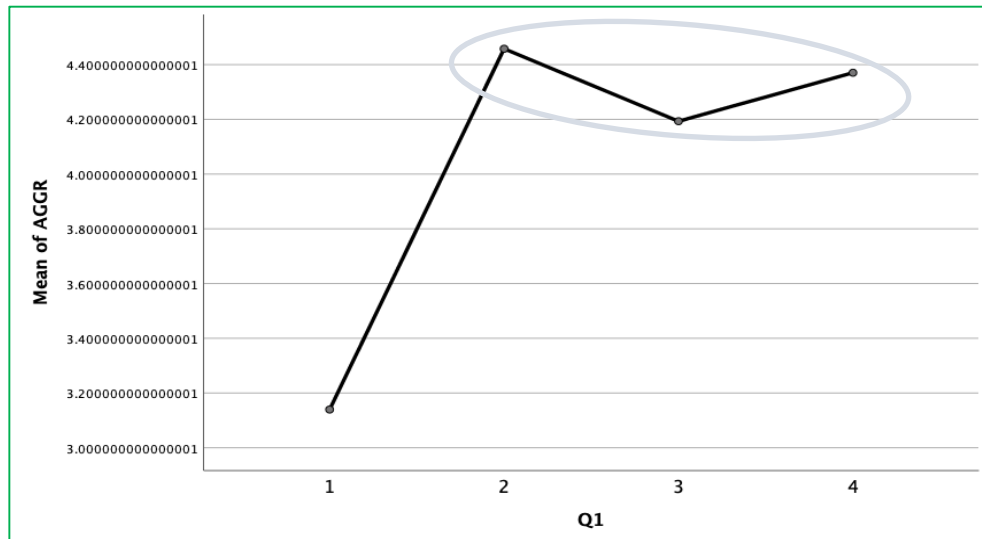*Showing mean plots of Aggression against Esport Genres*

Table 3. 15

Showing Scheffé Results of Mean Differences between Groups in Physical Attractiveness

Esport genre	N	Subset 1	Subset 2
Card games	74	2.846846846846847	
Tactical shooters	72	3.189814814814815	
Multiplayer Online Battle Arena.	99		3.952861952861953
Sport simulation	126		4.021164021164024
Sig.		.656	.996

Figure 3. 7

Showing mean plots of Physical Attractiveness against Esport Genres
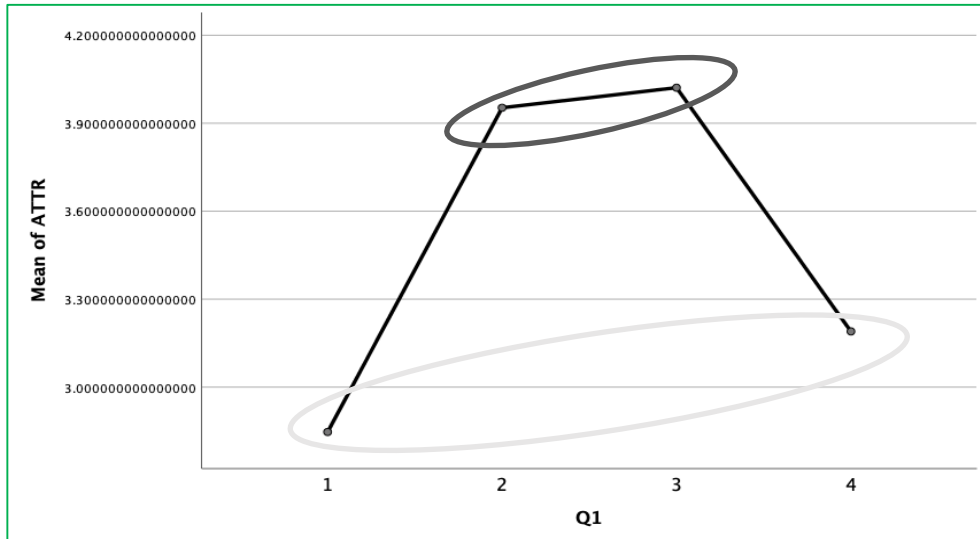
Table 3. 16

Showing Scheffé Results of Mean Differences between Groups in Gambling

Esport genre	N	Subset 1	Subset 2
Tactical shooters	72	3.486111111111111	
Card games	74	3.612612612612613	3.612612612612613
Multiplayer Online Battle Arena.	99	4.053872053872053	4.053872053872053
Sport simulation	126		4.320105820105822
Sig.		.220	.077

Figure 3. 8

Showing mean plots of Gambling against Esport Genres
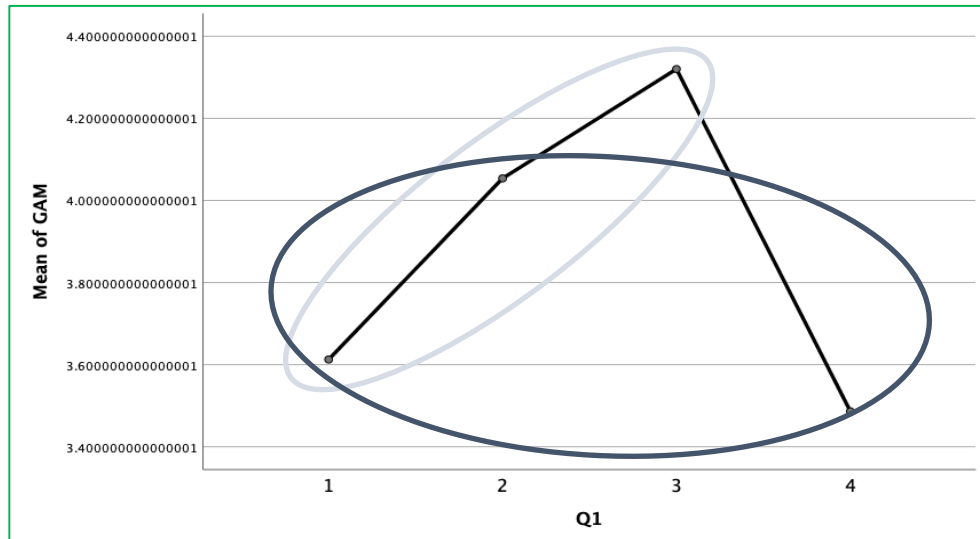
Table 3. 17

Showing Scheffé Results of Mean Differences between Groups in Drama

Esport genre	N	Subset 1	Subset 2
Card games	74	4.081081081081081	
Sport simulation	126	4.547619047619047	4.547619047619047
Multiplayer Online Battle Arena.	99		4.713804713804715
Tactical shooters	72		4.898148148148147
Sig.		.196	.448

Figure 3. 9

Showing mean plots of Drama against Esport Genres
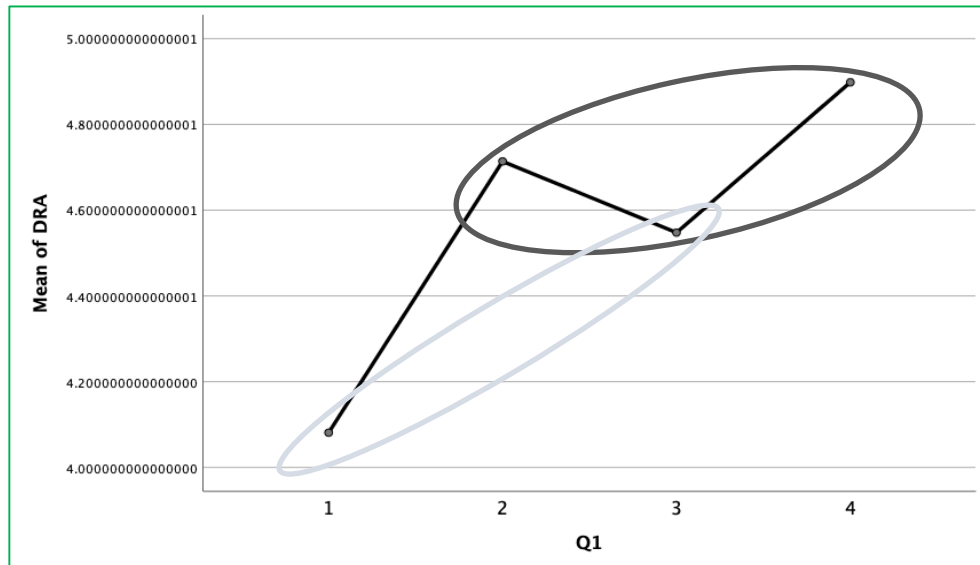
Table 3. 18

Showing Scheffé Results of Mean Differences between Groups in Originality

Esport genre	N	Subset 1	Subset 2
Card games	74	4.828828828828827	
Sport simulation	126	5.187830687830687	5.187830687830687
Multiplayer Online Battle Arena.	99		5.528619528619528
Tactical shooters	72		5.624999999999998
Sig.		.277	.126

Figure 3. 10

Showing mean plots of Originality against Esport Genres
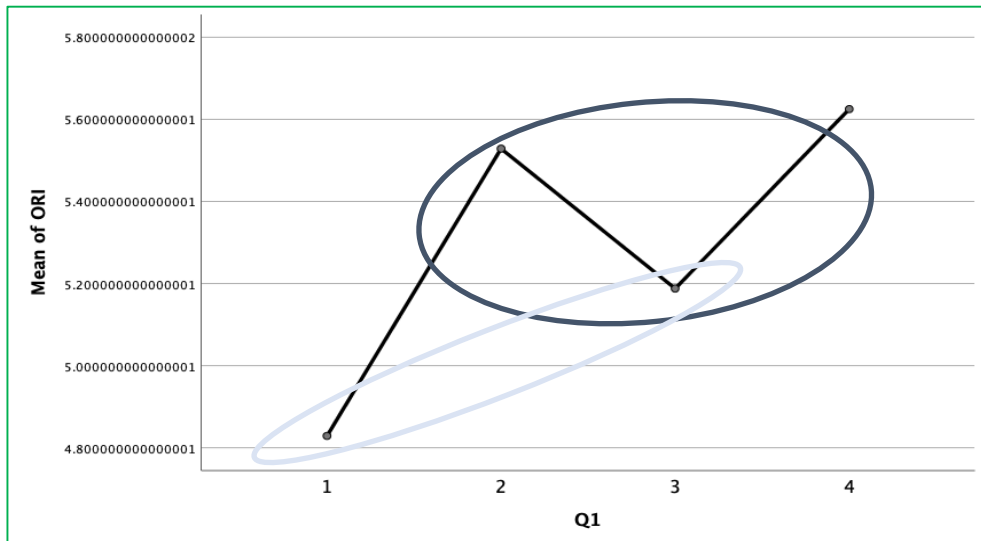
Chapter 4: Results

The study investigated which perceived images would influence watching esport and further examined perceptions attached to each of the genres four genres of esport (card games, multiplayer online battle arena, sport simulation and tactical shooter) Demographics were also measured to see how much they relate to watching esport.

This chapter would first show results pertaining to RQ1 in which the image constructs were measured to see their effect on predicting watching esport. RQ2 results will also be discussed after this.

4.1 Reliability test

The results from Cronbach Alpha indicated that the survey tool had internal consistency showing $\alpha < .910$ considered good. This indicates that

4.2 RQ1 Results

Acquisition of knowledge (Intellectual, $p < .004$), is statistically significantly associated with watching esports. However, it has negative effect ($\beta = -.140$) on the dependent variable while violence a subset of enjoyment of aggression (violent, $p < .050$) is statistically significantly

associated with watching esport and also has a positive (β= .089) effect on watching esport genres.

There were no statistically significant associations between the rest of the perceived and watching eSports but when examining the Beta value for socialization It can be noted that it has positive influence.

4.3 RQ2 Results

The study further investigated different perceptions attached to each of the four genres of card games, multiplayer online battle arena, sport simulation and tactical shooters.

The mean of perceived images was then plotted against the esport genres from the post hoc analysis.

The result for vicarious achievement construct (VA) showed that there is a mean difference between groups and classified them as subset 1 and subset 2. For subset 1, the scheffe results showed that there is no mean difference between Multiplayer Online Battle Arena (M= 4.85) and Tactical shooters (M=5.24). For subset 2 it reflects no mean difference between Tactical shooters (M=5.24), Sport simulation (M=5.38) and Card games (M=5.5.3). The results also showed that there is no statistical significance in

the two subsets in vicarious achievement (VA) but subset 2 show high mean compared to subset 1. Subset 1 shows results close to significance ($P=.153$)

Aesthetic construct (AES) results also showed that there is a mean difference between groups. Subset 1 classification of the scheffe results showed that there is no mean difference between Multiplayer Online Battle Arena (M= 5.13) and Tactical shooters (M=5.44). Subset 2 showed no mean difference between Tactical shooters (M=5.44), Card games (M=5.64) and Sport simulation (M=5.66). There is no statistical significance in all the subsets. Subset 2 showed high means but very high non significance score ($P=.600$) as compared to subset 1 ($P=.25$).

Another construct of perception of social interaction (SOC) was measured. Like the other two constructs of vicarious achievement and aesthetic, results also showed that there is a mean difference between groups. Subset 1 scheffe results show that there is no mean difference between Multiplayer Online Battle Arena (M= 4.95), Sport simulation (M=5.38) and Tactical shooters (M=5.39) while results for subset 2 showed no mean difference between Sport simulation (M=5.38), Tactical shooters (M=5.39) and Card games (M=5.49). The results showed that there is no there is no statistical significance in all the two subsets. Even though no significance is

observed, subset 1 showed *P*-value close to significance (*P*=.12) compared to subset 2 has the highest means but show high non significance score (*P*= .947).

Results from acquisition of knowledge (KNO) construct showed that there is no mean difference between all the genres. Subset 1 classification of the scheffe results showed that Sport simulation (M= 5.50) had the highest mean followed by Card games (M=5.44). Multiplayer Online Battle Arena (M=5.32) and Tactical shooters (M=5.32) followed respectively with the lowest means. Despite having one subset, the scheffe results (*P*= .866) showed that the subset is not statistically significant.

The result from Escapism (ESC) showed that there is a mean difference between groups. Subset 1 classification of the scheffe results show that there is no mean difference between Multiplayer Online Battle Arena (M= 5.29), Tactical shooters (M=5.39) and Sport simulation (M=5.72). Results for subset 2 showed no mean difference between Sport simulation (M=5.72) and Card games (M=6.00). From the results it showed that there is no there is no statistical significance in the subsets but subset 1 gave *P*-value closer to significance (*P*=.10).

Enjoyment of aggression (AGGR) was also split two subsets. Subset 1 classification consisted of only 1 group mean of Multiplayer Online Battle Arena (M=3.14) while the subset 2 showed no mean difference between Tactical shooters (M= 4.20), Card games (M=4.37) and Sport simulation (M=4.46). There was no there is no statistical significance in both subsets. Both of the show p-value that is far from significance (P= 1.0, P= .71)

Like some of the constructs discussed above, the result for physical attractiveness construct (ATTR) highlighted mean difference between groups as well. Subset 1 scheffe results show that there is no mean difference between Multiplayer Online Battle Arena (M= 2.85) and Card games (M=3.19). For subset 2 it reflects no mean difference between Sport simulation (M=3.95), Tactical shooters (M=4.02) No statistical significance in the two subsets is observed (P= .06, P= 1.0).

Gambling (GAM) was also measured. The results depicted mean difference between groups. Gambling like social interaction comprised of 3 group means per subset. Results of subset 1 scheffe results indicated no mean difference between Card games (M= 3.49), Multiplayer Online Battle Arena (M=3.61) and Sport simulation (M=4.05) while subset 2 showed no mean

difference between Multiplayer Online Battle Arena (M=3.61), Sport simulation (M=4.05) and Tactical shooters (M=4.32). No there was no statistical significance. Subset 1 showing results close to significance (*P*= .07) compared to subset 1 (*P*= .22).

Another result from Drama constructs (DRA) also presented outcomes in two subsets of which subset 1 grouping consisted of no mean difference between Multiplayer Online Battle Arena (M=4.08) and Tactical shooters (M=4.55) while the subset 2 showed no mean difference between Tactical shooters (M= 4.55), Sports simulation (M=4.71) and Card games (M=4.890). The results show no statistical significance in all subsets. Both of them show *P*-value that is far from significance (*P*= 1.0, *P*= .71).

The last construct of Originality (ORI) also presented result that showed mean differences between groups. Results from subset 1 indicated of no mean difference between Multiplayer Online Battle Arena (M=4.83) and Tactical shooters (M=5.19) while the subset 2 showed no mean difference between Tactical shooters (M= 5.19), Sport simulation (M=5.53) and Card games (M=5.62). The results show no statistical significance in all subsets. However, subset 2 results are close to significance (*P*= .12) compared to subset 1 (*P*= 2.7)

Chapter 5. Discussion

For the past decade, electronic sports termed esports have enjoyed a worldwide exposure driven by the growing provenance of online broadcasting technologies known as streams. Today, market reports shows that hundreds of millions of people spend their time watching these games played on virtual worlds. These games are also categorized according to into sub groups known as genres.

The study focused on measuring perceived images of esports and their relationship with consumption of its contents. The study wanted to find out how these images influence watching of esport by regular spectators and enthusiasts. It further examined perceptions attached to each of the given genres of esports in the study (card games, multiplayer online battle arena, sport simulation and tactical shooters).

The results showed that vicarious achievement was not statistically associated with consumptions of esport showing contrast to a study by McDonald, Milne & Hong (2002) who alluded that sports spectatorship and participant markets have indicated that achievement was positively associated with the viewership of all types of sports (baseball, basketball, bowling,

football, tennis). Usually, experiencing achievement along with the team or player is easier if spectators are more easily able to identify with a team or player (Funk & James, 2006). Hamari and Sjöblom (2017). From the study, it is relevant to say that even though esports stars are active in social media, they do not have adequate time to interact with their fans through chatting or any form of indulging in a conversation therefore not creating a link between the two.

The enjoyment of the aesthetic constructs defined as beauty in the inherent game also showed negative association as a motive to watching esports. Different video games are usually multifaceted and require higher concentration to follow and understand everything happening. Therefore, the believe is that events taking place within the game may demand higher concentration on action hence leaving no room for admiration of the aesthetic aspects of the game. Compared to those who focus on technicality of the game, viewers who admire the aesthetic aspects tends to have a wholly different experience. According to Wann, Grieve, Zapalac & Pease (2008), stylistic sports, such as figure skating and gymnastics, are often the ones that attract viewership through artistic beauty in an athlete's movements therefore this

element of discrete movement is not present in all genres which the study focused on hence the no significance shown by the results.

Previous studies have emphasized that social interaction plays a pivotal role in watching of both traditional and esport. However, from the results it indicated that social interaction as a predictor variable of watching esport proved otherwise a study by Hamilton, Garretson & Kerne (2014) who found out that esport platforms acts as virtual community for interaction of esport spectators and enthusiasts. The results indicated that there was no significance but positive effect on the watching of esport is noted. The interpretation is that the possibilities for social interaction provided by the services through which spectating is taking place within the selected genres of interests, are not affording the level of interaction needed to obtain adequate levels of enjoyment. Interacting on virtual sites is different from the interaction in real world and therefore the results do not correlate with the previous studies. The other observation that can be made is that different genres offer different platforms for chatting and some may not do it in a way that keeps the spectators engaged or having fun. It must be noted as well that some of the spectators are so immersed with the games to an extent of not

wanting to miss any single detail and therefore do not have time to chat or make friends.

The correlation between acquisition of knowledge and watching esport is statistically significant in one construct but insignificant in the other two. It has to be noted also, that even though it statistically significant it is slightly negative. Perhaps this could be explained by the fact that people watch esport to gain knowledge its strategies and other technical aspects that may later be transferred when they play these games. The results from the data showed that the largest number of people who watch esport also play the games in the esport genres. Whilst the other two constructs are not statistically significant, they show a positive influence. Overall, acquisition of knowledge can be viewed as being a significant predictor variable for watching esport relating to findings from viewers of StarCraft (a real-time strategic esports game) live event suggesting that the need for information is in high demand among viewers of StarCraft for understanding about the game (Cheung & Huang, 2011). According to the frequency results 49.9% of esport spectators also play esport games over hours per day and this translates acquisition of knowledge that will be transferred to playing at latter stage and this correlates to Hamilton, Garretson and Kerne (2014) findings alluding that knowledge

acquisition has been proved to be an important factor within video game watching.

Enjoyment of aggression by esports athletes is significantly associated with watching esport. These findings are supported by (Hamari and Sjöblom, 2017) who highlighted that athlete themselves appear on screen during broadcasts of esports tournaments during breaks between games, and when pre-filmed footage is shown in storytelling sequences. They argued that at least partially the enjoyment of aggression stems from the rivalries existing between esports teams and players. The same views maybe used to support the outcome of this result.

Lack of significance and negative association between watching esport and physical attractiveness of athletes correlates to Hamari & Sjöblom (2017) when they alluded that the players' appearance would not be important, because most of the events show the actual players to a fairly limited degree with attention instead focused on gameplay. As these games take place online, it is arguable that most of the spectators are focused mostly on the game play which is the focal point rather than players. From the previous literature it is evident that attendance at live events in particular has been the one

significantly associated with appreciation of physical attractiveness of players paralleled to online spectatorship (Sjöblom, Macey & Hamari 2019).

Gambling has been defined as the degree to which spectators bet to predict the winner to earn money. The results show that it is statistically insignificant and negatively associated with watching esport. Arguments drawn from this result is that unlike traditional sport, there are no developed platforms where spectators can predict the winner at the expense of winning big money.

Contrary to previous studies (Cheung and Huang, 2011) who highlighted the importance of drama in watching esports, the research results in drama imagery does not seem to be significantly associated with watching esports. All the three drama constructs do not show statistical significance. The results are also in contrast to a study by Krhulahti (2016) which found out that within the realm of video game streaming, dramatic turn of events have been argued to increase viewership. This negative association of drama and watching esport could perhaps be explained by the diminishing return nature of drama. For example, it is considered a dramatic turn of events when single player defeats an entire opposing team singlehandedly in Counter-Strike (an online first-person shooter game) or in FIFA or eFootball when a

team manages to even the score or win at exceptional odds but if almost every game contains an event perceived to be either a one-off or spectacular, then the excitement might not continue. Arguably, drama is expected to be from both teams or players but if it there is total dominance from one side, then the element of drama is not forceable hence making it not predictor variable of watching esport.

The enjoyment and excitement related to watching games with unique concept, freshness of aspect, design and style measured as originality indicated no significance but all the constructs have a positive effect on watching esport. It can be argued that the taste of style and design preference varies from one individual to another therefore the noticeable differences in the outcome. Even though the *P*-value show no significance the originality constructs can have a little impact in watching of esport.

As indicated on the purpose of the research, perceptions attached to each of the given genres of esports in the study (card games, multiplayer online battle arena, sport simulation and tactical shooters) were also measured to examine which ones are significant to a particular genre

Vicarious achievements results indicated that there is no mean difference between multiplayer online battle arena and genre 3 (sport simulation). These results highlight that in terms of co-living the achievements of teams and players the spectator or enthusiast is attached to, the distribution is similar across the 2 genres. Also, the results showed that even though sport simulation genre has the same perception on vicarious achievements as card games, it also shares the same mean distribution with genre 2 (multiplayer online battle arena-MOBA) and genre 4 (tactical shooters). However, it is notable that the data from the two groups show no statistical significance meaning that vicarious achievement does have significance in all the genres. The other conclusion drawn from these results is that even though there is no significance across the genres, all genres except card games have close means in teams of vicarious achievement.

Results from aesthetics indicated that there is no mean difference between card games and sport simulation. Subset 2 of results showed that sport simulation genre also shares the same mean with tactical shooters and MOBA. This indicated that sport simulation has the aesthetic construct distributed across the two groups however, no statistical significance was obtained from the results in both groups.

Social interaction results indicate that the enjoyment related to meeting, mixing and chatting with other people while watching the game is distributed the same across MOBA and sport simulation on both groups and differently between card games and tactical shooters. Group 1 indicated no mean difference between card games, MOBA and sport simulation and showed results closer to significance. Lower perception is found in card games while tactical shooters has showed high perception. However, despite these mean distributions social social interaction has shown no significance with any of the genres.

A unique result is found on acquisition of knowledge. The result showed that the acquisition of knowledge is distributed the same across all genres but it is not statistically significant.

Escapism results show that variable perception is the same for card games, sport simulation and MOBA. It also shares the same mean with tactical shooters in the second subset. The conclusion drawn from this result is that, even though escapism is distributed equally in the genres of card games, sport simulation and MOBA it is not a significant perception.

Results indicate that the enjoyment derived from watching the aggressive behavior and hostility exhibited by players is only different in card games. The other observation made is that there is no mean difference between the other three genres. However, it must be noted that enjoyment of aggression is not attached to any genre.

Results in physical attractiveness show equal distribution of means. The enjoyment to which the spectator finds the players physically attractive in card games is similar to tactical shooters. MOBA and sport simulation showed no mean difference and were grouped together in subset 2. Physical attractiveness like other variables showed to not be statistically significantly attached to any genre.

5.1 Practical Implications

This study focused on investigating perceived images that may influence watching esports. The results of this research provide insights for further development of esport which is still hasn't received the scholarly attention it deserves. furthered research may focus on other developments such as gambling services, on different above or other genres of esport.

The results of the study indicate perceived images that are more likely to contribute to esport consumption and creating path for future researches by providing different aspects of esports that may be worth accenting in further development of esports-related research. The study found it acquisition of knowledge is statistically significantly associated with watching esport but has negative effect in advancing this, esport developers might direct resources to developing better ways for the spectators to acquire knowledge from the esports broadcasts. An example maybe developing more effective ways of displaying the game states by, for instance, clearer depiction of player positions on the play area and ways for the commentators to more easily demonstrate team strategies give more information about player career statistics.

Enjoyment of aggression by the players was positively associated with watching esport. Esport players often have less screen time and witnessing their aggressive behavior is rare. In support of this finding, more screen time should be given to players not only games play and this may result in increased fulfillment of other aspects such as fandom.

The results showed negative association between drama and watching esport. This could be a reference to game developers in the examined genres

to find means of bringing back the diminishing aspect the drama. For example, StarCraft 2 has an element called fog of war, which obscures parts of the map for players. During game time spectators are not shown this element. In creating more drama tension, the broadcast can hide a looming ambush and only focus on that part of the map at the very last second as this would create thrilling experience for spectators. One way to study the effects of the diminishing nature of drama in a media content might be to devise an experiment involving content with varying levels of dramatic events, similar to research that has been done to study perceived aggression in sports (Bryant et al., 1982)

The results also showed a negative association between aesthetics and watching esport. Relating to this finding, it can be argued that esport developers do not follow or invest much on latest graphic technology but rather adhere to simplicity. It is arguable that the negative association may have been born out of lack of modern graphic advancements with enticing appearance and in addressing this attention should be channeled to enhancing the quality and beauty in appearing of the games.

5.2 Limitations and future research directions

The problem with via online surveys, is the fact that the data is self-reported and the respondents are self-selected. This kind of data obtained from self-reporting may affect the findings in the sense that the respondents are already engaged with the services and therefore always willing to participate. This therefore leads or disregard the perceptions of those who are less active and even some of the users who are not fully engaged. To minimize this effect, future research could combine survey data with actual usage data and proper experiments, in order to increase the strength on research topic.

Using comparison analysis gave the study the flexibility to use already existing and most of the widely measured perceptions or motives or consumptions. However, it is possible that there is something in the nature of esports that may be added to the research and differentiate the perceptions from the mostly used which are derived from traditional sports. The possibilities are that the perceptions used in the study do not entirely capture the spectrum of predicting esport consumption.

The beauty inherent of games and vicarious achievement have shown negative association with watching esport. The argument is that this could

give different results if investigated in the live context, when both the

spectator and the eSport players are physically present in the venue. It may

also increase the general aesthetic experience, as noted before in the context

of eSports events (Seo, 2013)

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국 문 초 록

e-Sports의 인지된 이미지와
콘텐츠 소비에 미치는 영향

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이 연구는 상호 작용성을 기반으로 한 디지털 미디어 시대에서 e-Sports와 관련된 연구가 극히 제한적이라는 점에서 시작하게 되었다. 특히 본 연구는 주요 e-Sports 장르를 멀티 플레이어 온라인 배들 아레나, 카드, 스포츠 시뮬레이션, 슈팅의 네 가지로 유형을 구분하고, 각각의 장르에 형성된 인지된 이미지를 조사 한 후 각각의 인지된 이미지가 소비에 미치는 영향을 탐구하였다. 이때 e-Sports에 대한 소비의 개념은 참여자들이 어떤 게임을 선호하는가 보다는, 관람이나 시청과 같은 개념에 기초하였다. 또한 구체적으로 본 연구에서는 인지이론과 이미지 인식이라는 학술적 논거를 활용하여 논의를 전개하였다. 인지의 개념은 지각의 산물과 같이 포괄적으로 정의되며, 이미지는 그 중

하나의 상을 의미한다. 즉, 인지된 이미지는 지각의 산물로써 특정 대상에 대한 총체적인 감정의 결정체라 할 수 있다. 본 연구에서는 포괄적인 e-Sports 에 대한 이미지를 조사하고, 각각의 이미지별로 시청행동에 미치는 영향이 어떠한지 파악하기 위해 설문 조사를 실시하였다. 설문지는 대상 응답자에게 배포하기 전 사전 테-스트를 거쳤으며, 선행연구들을 활용하여 신뢰 성과 타당성을 확보하였다. 조사된 자료들을 기초로 분석한 결과, 각각의 장르에 서로 상이한 이미지가 형성되어 있음은 물론이고, 각각의 이미지들 중 몇몇 이미지들은 소비에 영향을 미치는 것으로 분석되었다. 예를 들어 공격성과 지식 습득의 즐거움과 같은 이미지는 통계적으로 e-Sports 시청에 유의미한 영향을 미치고 있었다. 그러나 지식 습득의 이미지는 네 장르 모두에 걸쳐 평균차이가 없었고, 시청에 영향을 미치지 못하였다.