MASTER'S DISSERTATION

"ESPORTS SPECTATOR MOTIVATION: A CASE STUDY ON CS:GO"

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ABSTRACT

The digital world is increasingly becoming a focal point for companies to position themselves in order to gain the attention of their consumers. This is a world still underexplored, and the success of esports combined with the growth of its interested population (particularly among Millennials and Gen Z) shows that esports can be a place of new opportunities for companies to expose themselves and captivate their target audience. This research aims to understand the motivations of Portuguese consumers to watch esports (particularly the game Counter-Strike Global Offensive), to cluster them, and to correlate the motivation cluster with and the level of game engagement. Using the MSES scale to measure motivation, data were collected through a survey with 555 regular consumers of Counter-Strike Global Offensive, and main results show the existence of two clusters of consumers: one that values all the components of this motivation scale, emphasizing the socialization factors between consumers; and another that values equally these same motivations, but discards the importance of this social interaction between consumers. Also, data show that consumers who give more importance to social factors, tend to be more active in these gaming platforms and to invest more and make upgrades in their game inventories. Academical contribution of this thesis encompasses the validation of the MSES scale for the Portuguese consumers of esports. Yet, some managerial recommendation is provided, since knowing the motivations of these consumers becomes essential for marketing departments of companies

that target these young consumers, in order to optimize their investments on esports.

RESUMO

O mundo digital está a tornar-se cada vez mais um ponto focal para as empresas se posicionarem a fim de ganharem a atenção dos seus consumidores. Este é um mundo ainda subexplorado, e o sucesso dos esports combinado com o crescimento da sua população interessada (particularmente entre Millennials e Gen Z) mostrando que os esports podem ser um lugar de novas oportunidades para as empresas se exporem e cativarem o seu público-alvo. Esta investigação visa compreender as motivações dos consumidores portugueses para assistirem a esports (particularmente o jogo Counter-Strike Global Offensive), para os agrupar e correlacionar esses agrupamentos de acordo com as motivações e o seu nível de envolvimento no jogo. Utilizando a escala MSES para medir as motivações, foram recolhidos dados através de um inquérito com 555 consumidores regulares de Counter-Strike Global Offensive, os principais resultados mostram a existência de dois clusters de consumidores: um que valoriza todas as componentes desta escala de motivação, enfatizando os fatores de socialização entre consumidores; e outro que valoriza igualmente estas mesmas motivações, mas descarta a importância desta interação social entre consumidores. Além disso, os dados mostram que os consumidores que dão mais importância aos fatores sociais, tendem a ser mais ativos nestas plataformas de jogo e a investir mais e a fazer atualizações nos seus inventários de jogo. A contribuição académica desta tese abrange a validação da escala MSES para os consumidores portugueses de esports. No entanto, é fornecida alguma

recomendação de gestão, uma vez que conhecer as motivações destes consumidores torna-se essencial para os departamentos de marketing das empresas que focam nestes jovens consumidores, a fim de otimizar os seus investimentos em esports.

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LIST OF ABBREVIATIONS

CS:GO - Counter-Strike: Global Offensive;

CMEG - China Mobile Esports Games;

MOBA – Multiplayer Online Battle Arena;

FPS – First Person Shooters;

BR – Battle Royal;

CCG – Collectible Card Games;

RTS – Real Time Strategy;

FG – Fighting Games;

SG – Sports Games;

SFMS – Sports Fan Motivation Scale;

MSSC – Motivation Sports Consumption Scale;

MSSOC - Motivation Scale for Sport Online Consumption;

MSES – Motivation Scale for Esports Spectatorship;

COM – Competitive Nature;

FB – Friends Bounding;

SOL – Socialization Opportunity;

SKI – Skill Improvement;

KNW – Game Knowledge;

SKA – Skill Appreciation;

ENT – Entertainment Nature;

DRA – Dramatic Nature;

EXC – Competition Excitement;

VS – Vicarious Sensation.

INTRODUCTION

Despite being a concept that is still little understood in older generations, the term esports is well established in the Millennials and Gen Z culture. Besides, television broadcasting, the main communication channel for baby boomers and Gen X, has lost ground compared to the Internet, especially for the younger generations (Fortney, 2019).

The term sport is stated as "all forms of physical activity which, through casual or organized participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels." (Council of Europe, 1992).

Many academics have disagreed about the definition of esports. In one hand, some authors claim that this concept means a competitive sport where gamers use their physical and mental abilities to compete in different games in a virtual world (Marelić & Vukušić, 2019). On the other hand, it is also argued that esports, unlike traditional sports, are an interconnection of multiple platforms, and therefore esports are just organized competitions of video games (Jenny et al., 2016).

Although there are esports related to sports, such as FIFA 21, the vast majority is strategy-based on violence. In 2018, Thomas Bach, president of the Olympic Committee, stated that because the concept of esports is "contradictory to Olympic values, they cannot be accepted" (Wade, 2018). Therefore, esports

cannot be considered a sport but can be considered equivalent to "professional gaming" (Wagner, 2006).

Before discussing the behavior of esports consumers, it is essential to depict the scenario that supports its market. There are three gaming platforms: consoles (i.e., PlayStation 4, Xbox X, and Nintendo Switch), mobile (i.e., Smartphones), and computer. However, the computer is currently seen as the leading platform since it includes competitions that involve greater visibility and consequently more money. In addition, these platforms have in common the ability for players to face each other over a network via LAN (local area network) or the Internet which allows them to be behind a screen anywhere in the world.

According to Newzoo's Global Esports Market Report 2020, the world contains 7,79B people, of which 4,40B are online population (56,41%), among which 1,96B are esports aware (25,09%), and 222.9M are esports enthusiasts (2.86% of the world population). Moreover, the report predicted an audience for 2023, with an estimated growth of 30% from the current number of 495M viewers to 646M (Newzoo, 2020).

Furthermore, the esports market in 2020, has generated $1100.1M (meaning $4.94 per enthusiast). However, it is expected that in 2023 this market will reach values of $1556.7M, registering a total growth of 41.5% (Newzoo, 2020).

Nowadays, the revenue in this sector comes from six main streams: Sponsorship ($636.9M) representing 57.9%, and it is expected to grow 17.2% year on year, 16.9% from Media Rights ($185.4M) growing 17.3% year on year,

Merchandise and Tickets ($121.7M) representing 11.1% and expected to grow 15,2% year on year, Publisher Fees ($116.3M) representing 10.6% and expected to remain static in their year on year growth, Digital Media ($116.3M) representing 2% and expecting to grow 60,9% year on year, and Streaming ($18.2M) representing 1.7% and is expected to grow 33% yearly (Newzoo, 2020).

Currently, the top five cash-generating games in the world of esports in terms of monetary prizes are CS:GO, League of Legends, Dota 2, Call of Duty: Modern Warfare, and Rainbow Six Siege (Hore, 2020).

Further, it is worth mentioning that the 2019 League of Legends World Championship reached a record audience that left the world thinking about the future of esports. This event had more than 100 million viewers in the audience. That number peaked during the final game, where the teams of G2 and FunPlus Phoenix streamed for 44 Million spectators (Webb, 2019). In contrast, the 2019 Super Bowl, one of the most significant events with the highest level of visibility, had 103 million spectators watching the event (Gough, 2020b) , making the feat set by League of Legends World Championship in 2019 even more impressive.

As this research addresses the Counter-Strike Global Offensive game, some insights into it and its evolution as a videogame franchise should be understood. Counter-Strike is an electronic game released to the market in 1999 by the company Valve.

Since then, the franchise has been constantly growing with the introduction of Counter-Strike: Condition Zero launched in 2004, Counter-Strike Source launched in 2010, and the most well-known version, Counter-Strike

Global Offensive (CS:GO) launched in 2012 (Henningson, 2020). Despite having evolved over the years, the core objective of the game has remained the same.

In this electronic game, there is a team of five players acting as terrorists who need to plant a bomb and an opponent team of five counter-terrorists trying to prevent them from doing so. Each match is composed of 30 rounds: 15 rounds are played, and then the teams exchange sides for the remain 15 rounds. The winner is determined by the team with more rounds won in a single match. However, competitions can be played in different formats, ranging from "best-of-one", "best-of-three", or "best-of-five", thereby making the team with more matches won the winner of the competition (Rambusch et al., 2007). On top of that, first-person shooters are among the hardest games to master in reflexes, aim, and team coordination, making these competitions very intense for the players involved in them (Levrel, 2020).

Although Portugal lacks history in this international esport, some recent achievements can be reported. Namely the creation of the sAw organization. This Portuguese team created in 2020, is the first team in the country formed by professional Counter-Strike players who live only from profits obtained through this esport. With only 11 months of history, this team shattered all the records set by other professional Portuguese CS:GO teams, by reaching #25 position in the world rankings (HLTV, 2020). As a consequence, this team gained access to higher-level international competitions and in turn more spectators. Moreover, the story of Ricardo "Fox" Pacheco should also be mentioned in this regard since he is the only Portuguese player who competed in six Majors (considered the

CS:GO world cup), which is consisted of international mix teams. Furthermore, he was the first CS:GO player to receive Red Bull's distinction and become sponsored by this company (RTP Arena, 2018).

The platform most associated with the esports streaming service is Twitch, an online platform that in the last year had 760.711.803 million hours made by 14.491.228 million different channels (Sullygnome, 2020). This platform has been considered the future of media since it has gained more viewers than traditional television in the last few years by streaming gaming and other additional content. The live-streaming industry is currently experiencing a 99% annual growth, and the Twitch platform controls 76% of this streaming market (Pennington, 2020).

Nevertheless, it is not only through streams that it is possible to follow this esport. Similarly to traditional sports, there is also the possibility to follow these gaming competitions in stadiums where the public can witness their idols play their favorite games. For example, in 2017 the CS:GO competition Intel Extreme Masters Katowice, which took place in Poland, had 173,000 people travelling to the arena to watch the competition unfold live, as well as more than 46 million online viewers (Armstrong, 2017).

Furthermore, *Rádio e Televisão de Portugal,* known as RTP, the public Portuguese broadcasting service, despite having a twitch channel, RTP Arena, already broadcast 25 minutes a week of esports content on national television open channel RTP1 (RTP, 2016). On December 2020, the company decided to launch RTP Arena, an independent television channel debuting with CS:GO content named (Louro, 2020).

Compared to previous versions of Counter-Strike, the Global Offensive expansion added an extra feature to the game, the skin market. With this feature, players can equip the same weapons but with different styles. Although this does not give any competitive advantage to the player wearing a particular skin style, many of them have become highly collectable items throughout the years with a very high market value. For instance, and according to Steam Analyst (2020) a skin by the name M4A4 Howl as a current market value of more than $3,500 (Steam Analyst, 2020). As such, these values bring the attention of not only CS:GO players both professional or recreational as well as traders, gamblers, and collection holders, with many of them obtaining huge profits thanks to this market. For example, the company OPskins, which has no connection to Valve or Steam, despite being only an intermediary for these item transactions, obtained $42M in sales in two years (Sacks, 2017).

Big companies already started to recognize the importance of being present in this market, aiming at agreements with major esports teams to reach this vast population. Namely, Major Ross McKnight from the US Air Force (net worth: $161 billion), stated that the players on Cloud9's CS: GO team had the "same level of discipline, rigor, and achievement" as his division and also that fans of this organization "can make a difference in the US Air Force". These words resulted in a sponsorship for this esports organization with the US Air Force logo on the team's jerseys as well as a web series with both worlds together (Olivia, 2019).

Another good example is the one of Disney (net worth: $ 130 billion), which in 2019 acquired Marvel for $4 billion and in the same year decided to make a strategic link with one of the biggest teams in the world of esports, Team Liquid. This partnership allowed the creation of Marvel-themed jerseys to be worn by players of that organization, therefore sparking a revolution in the esports equipment sector for being disruptive (Olivia, 2019).

Nonetheless, esports has started to be recognized as more than a lucrative market. In 2016, Vladimir Putin expressed his support for esports, making Russia one of the first countries in the world to incorporate esports as a discipline in their schools. This feat might change the mindset of parents who still think and look at video games as bad and harmful influences, by making their children's improve significantly in other aspects through the use of this media (Moghe, 2020).

Due to the market size and its growing perspective, this research aims to understand the motivations of consumers to watch Counter-Strike Global Offensive. Additionally, the secondary objectives can be organized as follows: (a) to validate the Motivation Scale of Esports Spectatorship scale for CS:GO; (b) to describe and to cluster watchers of CS:GO according to their motivation profile; (c) to verify if there is a correlation between the motivation and the level of game engagement.

The research is justified by the potential investment (and consequent return in terms of revenue and profits) of different market players, like the championship organizers, sponsors, media, advertisers, streaming service providers, among others.

The thesis begins with a literature review. Next, it presents the methodology adopted in the empirical study, followed by the analysis of the collected data. Finally, the discussion of the results obtained leads to the conclusions and main contributions of the study.

1. LITERATURE REVIEW

The research on esports is scarce, being most studies focused on the psychological consequences caused to videogame players. As shown by the numbers presented in the introduction, this is a market of growing interest, thus more studies should be performed to better understand this potential market (Carvalho, 2015).

1.1. THE GROWTH OF THE MARKET AROUND ESPORTS

With spectators and prize pools in the millions, esports has grown into an economically significant sports with an ecosystem and a marketing landscape that has begun to attract companies such, as advertisers and sponsors (Ströh, 2017).

To better understand this growth, the history of professional gaming should be portrayed.

The first videogame ever created was the Cathode Ray Tube Amusement Device in 1948, developed by Alan Turing (Yenişehirlioğlu et al., 2018). However, was only in 1971 that Pong was launched. This game became hugely influential in arcade gaming stores at the time and began to shape the gaming industry as we know it today (Kim et al., 2020).

To better understand the evolution from 1971 until today, an analogy can be made which contrasts the technological progressions of the time with the current one. In 1971, the first microprocessor was launched by Intel (Intel, n.d.), the same company that today is one of the biggest in the gaming world, since most professional players use their products in their devices and because it is one of the major sponsors of the esports industry. Therefore, one can compare the Intel newest microprocessor (Intel Core i9-9000KF) with Intel 4004 (the pioneer processor of Intel), where the former is 7200x faster and has a 32000000x greater memory capacity (GamingVersus, 2020).

Besides, as technology improves, so do games (Kim et al., 2020). For instance, the Internet is considered as one of the most disruptive technologies that the world has ever seen. First appearing in 1985, has a means to support the community of researchers and developers, it quickly became an essential tool used by other communities for daily computer communications (Leiner et al., 1997). Plus, nowadays, there are several devices where games can be played through platforms connected by the Internet like tablets, gaming consoles, computers, and smartphones. The developments in these platforms both in Hardware and Software and the general adoption of the Internet through those devices allowed developers to improve their games in complexity, memory, and graphical design. That progression is visible when comparing videogames such as the 1971 Pong (where the elements of the game were just two bars and a ball) to current virtual reality games (where players can interact with each other in different ways) (LaViola Jr, 2008).

It was not just the technological revolution that led to the rise of esports. In its early days, e-gamers made money mainly from prize pools of tournaments in which they participated, where only the best could get steady income in this sector (Kim et al., 2020). Even though tournament prize pools are much higher than in the past (Mitchell, 2018), this source of income is not currently the only source of revenue for e-gamers (Kim et al., 2020). Actually, the appearance of live streaming platforms has not only given the opportunity for e-athletes and "twitch professionals" to gain a steady following but also became the main source of income for many of them as well (Johnson & Woodcock, 2019).

In addition to the growing esports trend on streaming platforms, the increase of content consumption on the internet as well as the faster spread of information have created the appearance of new jobs within this industry. Amateurly or not, players, commentators, and analysts appear on their channels where they broadcast games to the general public while providing their thoughts about them (CS:GO, League of Legends, Apex Legends, and among others). Due to this "gold rush" (Johnson & Woodcock, 2019), "statistics show that this type of employment is quickly growing as a career choice, with demographics typically being adults under 25 and earning under $50,000 each year" (Kim et al., 2020, p. 3).

Several factors influence how much a streamer manages to make on a monthly basis. First, viewers reward their favourite streamers both through views and by the time they are willing to spend seeing them. Additionally, there is the possibility to donate money without restrictions. This means that streamers can receive donations ranging from a few cents up to an undetermined

amount of money. Another factor is their monthly subscribers. These subscribers can choose packages with a plethora of different benefits, such as speaking directly with the streamer, having access to new icons in the chat, play with the streamer, and receive notifications when he is "live". These prices can go from 4.99$ up to 24,99$ monthly (Gros et al., 2017). However, streaming platforms usually get a cut from these earnings, like twitch that "does a 50/50 split with the streamer" (Lehnert et al., 2020, p. 3). Lastly, there are the personal sponsors which are directly linked with on how famous the streamer actually is.

Usually, the most followed streams occur at the end of the week between Friday and Sunday, resulting in a greater number of highlights. Furthermore, the biggest esports tournaments also tend to take place during this time. The average number of viewers seems to be constant during the working days, yet this changes during the weekends, where the number of active daily streams generally has two daily peaks corresponding to the European and American timezones. The most active country on Twitch is the United States, especially along the west coast. The most significant peaks of viewership occur on days of major international gaming events. These events can account for three times more spectators than on regular days (Kaytoue et al., 2012).

Another factor that demonstrates the evolution of esports is the creation of IEFS (International Esports Federation). When a sport reaches a particular dimension, it is necessary to regulate it to standardize communities and competitions (Rory Summerley, 2019). For example, in football it was necessary to create a federation that would regulate it worldwide. Thus, if this did not

happen, probably this sport would be practised with different types of rules instead of following the same principles, not having homogeneity by all practitioners. This same logic was naturally applied to esports once it entered the competitive environment (Kim et al., 2020).

After the global financial crisis in 1998, South Korea decided to position itself as a country that values culture, tourism and sport. In 2000, they created the "World Cyber Games" which was later considered as the "Olympics of Esports" demonstrating to the world the potential of this sector (Yang, 2018). China, aware of this novelty, decided to create the China Mobile Esports Games (CMEG), which was the first official esports tournament played on a mobile device. However, this was considered to be a means of propaganda in order to bring attention to another structure that had a big impact on the world of esports, the World Cyber Arena. This arena was created in 2014, serving as a place for promotion of esports and its industry (Yang, 2018). Likewise, similar strategies for the esports industry occurred around the world (Kim et al., 2020).

The growth of e-sports in recent years can also be depicted by the evolution of the prizes of its most prestigious competitions. For example in 2008, in Sweden, one of the major competitions of competitive gaming contained a total prizepool of €2000 (Jonasson & Thiborg, 2010). In contrast, the Dota 2 tournament "The International 2019" reached a total prizepool of €30M (Nordmark & Health, 2021).

1.2. COMMUNICATIONS CHANNELS IN ESPORTS

Even though there is a lack of scientific information regarding the communication channels used in esports, some similarities between this branch and traditional sports can be found. As a result, this chapter reviews articles around sports marketing in order to better understand these communication channels.

Usually, sports marketing has the objective of involving fans, by generating interest in the sport, increasing their participation, develop the brand of the club, league, or federation and encourage the fans to fully engage with the sport (Holland, 2015).

Traditionally, the most significant source of income in top-level sport comes from television broadcasting. Thus, television contracts tend to be the most lucrative, followed by sponsorships and box office revenues. However, technology as slowly been changing this competitive scene. For instance, the introduction of social media platforms, allowed fans to interact and communicate with athletes, teams, sponsors and with each other. Thus the entry of new types of social media services threatens the current dominance of television companies in sports broadcasting (Holland, 2015).

As previously mentioned, the esports scene is rapidly growing, putting on huge events with millions of spectators and press attention. As such, it becomes important to understand this market and how brands can benefit from it. It is important to highlight the importance of sponsorships in the world of esports since the production of these events only takes place when this bridge between

the competitive part and the brands comes together. This gaming-aware population is an attractive group for many companies. Yet, the esports landscape is still difficult to understand since it is seen as a new world with much to explore (*Marketing Channel Esports – How to Get the Attention of Young Adults?*, 2015).

Although American football and esports are distinct modalities, is possible to draw some comparisons. For example, in 2018, the famous game League of Legends celebrated its 10th anniversary which left many people wondering about the potential that the event had. However, one year later the game hosted its World Championship and reached a record audience of over 100 million viewers (Webb, 2019). In contrast, the 2019 Superbowl reached an audience of 103 million (Gough, 2020b).

Furthermore, the Superbowl is considered to be one of the most prominent marketing and advertising opportunities for brands (Adams, 2021), with a 30-seconds advertising spot during the game costing up to 4.5 million dollars (Yu, 2020). Another factor to consider from this event is the presence of world-renowned artists. In 2019, they invited artists such as Chloe x Halle, Travis Scoot, Gladys Knight, Marron 5, and Big Boi (Finny, 2019), bringing the entertainment aspect to this event.

Likewise, Riot's, the gaming company responsible for hosting the League of Legends World Championship finals, used the same concept of bringing artists to its event, where each of them created themes according to this competition (Erzberger, 2019). It all started in 2014, when Riot chose Imagine Dragons to create the theme "Warriors", and it was the first-ever song produced in order to be showcased at this event (Villela, 2018). This music has more than 295 million

views on YouTube and is part of the album "Smoke + Mirrors" of these same artists (League of Legends, 2014).

In addition to these data provided by partnerships between Riot and international artists, another association can be highlighted since the 2019 League of Legends World Championship trophy was developed by the multinational Louis Vuitton (Vuitton, 2019).

As previously mentioned, these consumers are a growing group, scarce studied, and with a great potential for different companies to interact with their potential clients in the digital environment. In this way, it is essential to recognize the factors that will influence these consumers so that sponsors and marketing managers can enhance their targeted media and make it more effective in reaching this target audience.

1.3. Esports typology and Counter-strike Global Offensive

Since the main topic of this thesis is the consumers motivations, and considering that motivations vary from sport to sport, one should previously discuss the esports typology. For example, for rugby enthusiasts there are certain motivations that have more weight in their choices than people who watch gymnastics. In one hand the aggression at its highest level while on the other the aesthetics and delicacy of the gymnast movements is something that attracts their fans (Rockel, 2020).

Considering esports as the competitive aspect of gaming (Hallmann & Giel, 2018), it is possible to compare it with traditional sports. Just as the word "sports" includes all the modalities, the same happens in relation to esports: there are several videogames and each one of them is considered a modality, but not all videogames are considered esports.

This research does not intend to study the esports population as a whole but rather a small fraction of it, most specifically, the consumers that watch CS:GO. As such, it is important to understand in which category this esports is inserted as well as on what this video game is based on.

According to the Associación Española de VideoJuegos (2018) and as can be seen in table 1, there are different genres in esports (Asociación Española de Videojuegos, 2018).

Table 1 - Esports typology according to "Libro blanco de los esports en España" (2018)

Typology	Description	Examples
Multiplayer Online Battle Arena (MOBA)	Multiplayer Online arenas	League of Legends, Dota 2, Heroes of the Storm and Smite
First Person Shooters (FPS)	Weapon-based combat in a fist-person perspective.	Counter-Strike Global:Offensive, Overwatch, Call of Dutty and Rainbow Six Siege.
Battle Royale (BR)	Online multiplayer video game that blends the survival, exploration, and scavenging elements of a survival game with last-man-standing gameplay	Playerunknow's Battlegrounds, Fortnite, and H1Z1
Collectible Cards Games (CCG)	Game that mixes strategic deck building elements with feature of trading cards	Hearthstone and Clash Royale
Real Time Strategy (RTS)	Time based videogame that centres around using resources to build units and defeat an opponent	Starcraft 2 and World of Tanks
Fighting Games (FG)	Game based around close combat between a limited number of characters, in a stage in which the boundaries are fixed	Tekken 7 and Street Fighter V
Sports Games (SG)	Game that simulates the practice of sports	FIFA 21 and NBA 21

Source: "Libro blanco de los esports en España" (2018)

The examples given above are considered esports, but several games are not part of this competitive aspect. Minecraft is a game about placing blocks and going on adventures. In this game, randomly generated worlds are explored. Amazing things are built in it, ranging from the simplest of homes to the grandest of castles. Despite having sold over 106 million copies and having a very large

active community this is not enough to be considered an esport (British Esports Association, n.d.).

There are three essential factors for a videogame to become a esport: playability, spectatability and support (Gilroy, 2019).

Regarding playability, if a game is not fun, it will never be popular enough to become an esport. For an esport to be successful it is required to transmit to players an attractive experience, so players can return to the same game repeatedly. This can be accomplished through complexity, as it is the case of League of Legends, where there is always something left for players to master (Gilroy, 2019).

Spectatability refers to the viewing experience, that is, an esport must be easy for a spectator to understand what is happening during a game. For example, during a match of Tekken 7, a video game inserted in the Fighting Game typology, two players face each other, by controlling a character´s movements and just like in traditional fighting sports, the winner is the competitor who ultimately stands (Gilroy, 2019).

Support refers to the support that the game publishers provide. Even though they do not have direct influence on whether a videogame is considered to be an esport, they can set rules that are suitable for the game to grow in that sense. There are two types of ecosystems: it is considered a closed ecosystem when the producer controls all levels of the competitive scene, and open ecosystems are those that the producers have no control over the competitive scene, as is the case of CS:GO (Gilroy, 2019).

Counter-Strike is an adaptation of the videogame Half-Life created by the company Valve and distributed through a video game platform called Steam (Claypool et al., 2003). It fits the typology of First-Person Shooter and is considered one of the most popular and successful games in the world (Rambusch et al., 2007). This videogame allows players to enter in two different worlds, taking on the role of a terrorist, trying to hold hostages or exploding bombs at a landmark, as well as taking on the role of a counter-terrorist agent, trying to prevent the opponent´s attacks. Each player must connect to a server normally located via the internet, except in the case of face-to-face tournaments where they connect to physical servers, providing less latency and a better gaming experience. When five players are positioned as both terrorist and counter-terrorist the game begins and a map is loaded (Claypool et al., 2003).

Currently in the CS:GO scene the game mode used in the competitive world is the one where terrorists must plant the bomb. There are many maps, but only seven are part of the competitive world. However, these maps are constantly being changed from the map-pool, with some of them suffering re-works to become more competitive in order to re-enter the competitive scene (Abreu, 2020). During one game each map is played during several rounds. Each round ends if the objectives are reached (detonation of the bomb by the terrorists or its defusing by the counter-terrorists) or if the time set for that round ends. At the beginning of each round, both teams are authorized, to buy weapons and utilities with the money they have been collecting from previous rounds, that is, the better the team does in previous rounds the more money they

will have to equip themselves to fight the opponents' attack (Claypool et al., 2003).

As stated before, there are millions of people watching official tournaments. Regarding CS:GO tournaments, it is possible to highlight the ELEAGUE Major 2018, which at its peak had almost 1.9 million spectators. Also, tournament prize pools have been increasing year after year reaching $ 22.65 million in 2018 (Gough, 2020a). Peter Rasmussen, a Danish player known in the CS:GO scene as "Dupreeh", leads the table of players with the most tournament earnings (Earnings, 2020).

1.4. MOTIVATION MEASURES

The concept of marketing emerged with the need to study consumer behaviour. "Marketing starts with the needs of the consumers and ends with their satisfaction" (Durmaz & Diyarbakırlıoğlu, 2011, p. 3).

Motivation refers to the processes that causes people to behave as they do. Psychologically, motivation occurs when a consumer has the desire to satisfy a need. "Once a need has been activated, a state of tension exists that drives the consumer to attempt to reduce or eliminate the need" (Solomon et al., 2006, p. 92). There are two types of needs: the utilitarian, described as the desire to achieve some practical benefit, and the hedonic, which refers to experiential needs (Solomon et al., 2006).

In both cases, these needs are characterized by a discrepancy between the consumer's current state and their ideal state. This path creates a state of tension in the consumer. Moreover, the drive is determined by the urgency the consumer feels to reduce this tension. A primary need can be satisfied in many ways, but their personal and cultural experiences influence their path to achieving their goal. These factors combined create a desire, which is the manifestation of a need. When this need is satisfied, the tension reduces, and so does motivation until the process begins again (Solomon et al., 2006).

Thus, motivation can be described in terms of the force it exerts on the consumer and the consumer's particular direction to reduce the tension imposed by the need (Solomon et al., 2006).

Psychologists have developed theories about human motivation and according to Kotler there are three theories that can be highlighted for consumer analysis and marketing strategy: the theory of Freud, Maslow, and Herzberg (Kotler, 2000).

Freud's theory assumes that the psychological forces that impacts an individual's behaviour are largely unconscious and cannot be fully understood in one's motivations. It is coupled with a laddering technique to trace the motivations of individuals from instrumental to terminal ones. Consumers react not only to the benefits declared by brands but also to small clues given by them (Kotler, 2000).

Maslow's theory seeks to explain why people have special needs at certain times. As such, this theory explains that needs are arranged in a hierarchy

according to urgency. There are five categories, defined in this order of importance: physiological, safety, social, esteem, and self-actualization needs. Once a need is satisfied, the human being will try to satisfy the next one (Kotler, 2000).

Herzberg's theory is based on two factors, those that cause dissatisfaction and those that cause satisfaction. It assumes that the absence of factors causing dissatisfaction is not sufficient to persuade a consumer to purchase a good or service, and the existence of factors causing satisfaction must be actively present (Kotler, 2000).

Due to the broad descriptions given by schoolers for the term motivation, measuring it becomes a hard task.

When discussing sports, there are several scales of motivation and different approaches, among which four can be highlighted: (1) Sports Fan Motivation Scale (SFMS), (2) Motivation Sports Consumption Scale (MSSC), (3) Motivation Scale for Sport Online Consumption (MSSOC) and (4) Motivation Scale Esports Spectatorship (MSES).

Table 2 summarizes the four scales previously mentioned scales.

Table 2 - SFMS, MSSC, MSSOC and MSES

Scale	SFMS	MSSC	MSSOC	MSES
(# of factors)	8	10	10	10
Authors	Wann	Trail & James	Seo & Green	Qian et al.
Year	1995	2001	2008	2019
Eustress	X			
Self-esteem	X			
Escape	X	X	X	
Entertainment / Drama	X	X	X	XX
Economic	X		X	
Aesthetic	X	X		
Group affiliation / Social	X	X		X
Family	X	X		
Achievement		X		
Knowledge / Technical knowledge		X	X	X
Physical skills		X		
Players' physical attractiveness		X		
Aggressiveness		X		
Information			X	
Interpersonal communication			X	
Pass time			X	
Fanship			X	
Team support			X	
Fan expression			X	
Competitive nature				X
Skill improvement				X
Skill appreciation				X
Friends bonding				X
Competition excitment				X
Vicarious sensation				X

The SFMS was developed in 1995, by Wann, and focused on the motivational factors responsible for the sports fandom. This scale includes eustress, self-esteem, escape, entertainment, economic, aesthetic, group affiliation and family (Wann, 1995).

The MSSC was developed by Trail and Jeffrey in 2001. This scale was created with the purpose of solving some of the problems encountered in the

SFMS and aims to calculate the motivation of the spectators watching sports by using the following topics: escape, drama, aesthetic, social, family, achievement, knowledge, physical skills, physical attractiveness of players and aggressiveness (Trail & Jeffrey D. James, 2001).

In 2008, Won Jae Seo and B. Cristine Green declared that internet has become a significant tool for sport marketing. Professional sports team's Web sites are now an important component of their marketing mix, as such these authors decided to develop a valid and reliable scale to measure motivation for online sports consumption. The focus of MSSOC scale is the team's website. During the research, these authors have identified 102 reasons. However, after the refining stage of the scale, they ended up validating 10 of them: information, entertainment, interpersonal communication, escape, pass time, fanship, team support, fan expression, economic and technical knowledge (Seo & Green, 2008).

In regards to esports, Lee et al (2014) provided some insights about the motivational factors connected with watching this media. However, these factors were directed from scales measuring the traditional sports consumption. Moreover, the author only focus was on League of Legends fans, which do not depict an accurate representation of the entire esports population (Lee et al., 2014). While some reasons for online esports viewers are the same as for traditional sports, there are still some motivations related to esports to be discovered (Qian et al., 2020).

In the same line of thought, Qian et al. (2019) have developed the MSES scale where 10 factors were validated: Competitive nature, Socialization opportunity, Skill improvement, Friends bounding, Game Knowledge, Skill

appreciation, Entertaining nature, Dramatic nature, Competition excitement and Vicarious sensation (Qian et al., 2020).

Comparing these four scales, can be found that some of them share the same motivations, such as "Escape", "Entertainment" or "Drama", "Economic", "Aesthetic", "Group affiliation" or "Social", "Family" and "Knowledge" or "Technical Knowledge".

Thus, is necessary to deeply analyse each factors proposed by these four motivation scales:

- Eustress, this term was defined in 1976 by Selye as a "good stress" (Selye, 1976) meaning that viewers often feel "breathlessness" when indulging in some type of experience. It is also considered as a form of stimulation generated by the excitement of the moment of the game (Rockel, 2020). For example, the anxiety provoked in the spectator when watching a tiebreaker for penalties in a soccer match.

- Self-esteem refers to the feeling provoked by the result of the spectator's favourite team or player. It is also linked to group affiliation, given that the self-esteem of fans of "team X" is also influenced by the fact that they are part of the "group of fans of team X" (Ellemers et al., 1999).

- Escape refers to the fact that the viewer seeks a distraction from his/her normal life and his/her worries. Considering sports as an escape motivation, implies that the person wants a break from their routine (Seo & Green, 2008; Shaw, 2013).

- Entertainment/Drama describe the viewer's desire to have fun. This motivation is associated with the awakening of playful and pleasant affections linked to the emotions provided in serious/critical situations (Elias & Dunning, 1986).

- Economic factor is directly linked to the viewer's motivation to potentially receive some financial reward, as a result of attending/watching a particular event (Wann, 1995). For instance, by betting in a game through a betting system. Even though many people who bet on sports are unable to get their money back (Conlisk, 1993), placing a bet can increase the feeling of drama and enthusiasm within the viewer (Elias & Dunning, 1986).

- Aesthetics is seen as an art form in a competition, that is, the sporting environment in which one can appreciate and watch art. Although there is an ongoing debate about whether a sport should be considered an art (Best, 1980; Saw, n.d.; Wertz, 1979), with academics such as Best (1980) arguing that a sport itself cannot be considered an art form. Others beg to differ, such as Rockel (2020), which explains that in gymnastics, not only there is a sporting objective of performing a certain exercise, but also an aesthetic objective that aims to please the members of the judges (Rockel, 2020).

- Group Affiliation/Social refers to a spectator's feeling of being part of a group or community (Shaw, 2013). For example, Formula 1 spectators, may come out as "F1 fans", but this association implies traditions that may or may not be exclusive to this group of fans. Ellemers et al. (1999) determined that the feeling of being "part of a group" is an important factor that influences the viewer's decisions (Ellemers et al., 1999). Moreover, Gibson (1998) explained

the concept of sports tourism which means a social experience that comes from watching games/events together (Gibson, 1998). There are three types of sports tourism: nostalgia sports tourism, active sports tourism and event sports tourism (Fairley, 2003).

- Family has many similarities with the previous motivation, however, it is directed to the family issue. For instance, the parent taking their children to the stadium to watch a football game becomes an activity that strengthens bonds between them. This factor with the escape factor is the one that makes the population want this form of entertainment (Shaw, 2013).

- Achievement emphasizes the quest of consumer's motivation to see their teams/athletes winning titles (Shaw, 2013).

- Knowledge addresses the motivation of consumers to watch a game and observe the strategies of a certain team, opponent or not, thus emerging more in the knowledge of the game itself (Shaw, 2013).

- Physical Skills factor represents the viewer's motivation to watch excellence and creativity in the athletic performance (Funk et al., 2009). Spectators usually like to see competitions where the best of each sport are competing because their actions and their experience on the field causes a feelings of ecstasy. Plus, it is also argued that spectators watching those feats of physical skill, desire to be able to copy them (Shaw, 2013).

- Physical Attractiveness of Players refers to the "sex appeal" of an athlete (Rockel, 2020).

- Aggressiveness refers to the motivation that is related to rough play or fighting between teams in a match. Intimidation and a strong macho atmosphere are characteristics of aggressiveness (Rockel, 2020).

- Information is the motivation associated with being up to date with the world of sports (Seo & Green, 2008).

- Interpersonal communication involves the share of knowledge and discussion of ideas with other fans (Seo & Green, 2008).

- Pass time is related with the motivation of consumers to spend their free time doing something (Seo & Green, 2008).

- Fanship is defined when the consumer considers himself a big fan, be it a team, a sport, or player (Seo & Green, 2008).

- Team Support is the motivation to demonstrate the support to the spectator's favourite team (Seo & Green, 2008).

- Fan expression includes the motivation to be able to express their opinions about the team or player via online (Seo & Green, 2008).

- Competitive nature is the motivation of viewers looking to acquire a sense of competitiveness (Qian et al., 2020).

- Skill appreciation is the motivation that appreciates watching exceptional skills, unique and remarkable plays and strategies executed by professionals (Qian et al., 2020).

- Skill improvement refers the fact that spectators watch esports games to learn new skills, and with that improving their own game by imitating professionals players (Qian et al., 2020).

- Friends bounding is associated with the motivation to maintain real-life social relationships via esports (Qian et al., 2020).

- Entertaining nature is linked with the viewer's search for happiness, pleasure and excitement (Qian et al., 2020).

- Competition excitement is related with excitement caused by the spectators while watching the game (Qian et al., 2020).

- Vicarious sensation is the personal motivation that makes spectators that are watching a game, feel that they are playing in it (Qian et al., 2020).

Previous studies done by other researchers on the motivation of esports consumers have used the Sports Consumption Motivation Scale, and the Sport Fan Motivation Scale. However, their results were not able to correctly analyse the factors that influence the motivation of esports consumers, since their analysis was made using the motivations of traditional sporting consumers (Lee et al., 2014).

As a result, the MSES scale was chosen by the researcher in order to achieve this study's purpose, since its format allows the distribution through online media and it is already being used as a marketing tool. Thereby providing a more accurate assessment of the needs and wants of the online esports spectator, as opposed to adapting existing scales developed for the study of traditional sports consumers (Qian et al., 2020).

However, it is important to refer that the MSES scale has never been used to analyse the spectators of CS:GO.

1.5. CONSUMERS ENGAGEMENT

Since different motivations drive esports audiences, reaching this population through traditional communication channels becomes a challenging task. As mentioned before, brands have been using sporting events to promote their brand awareness and recognition (Chawki, 2016). Consumer engagement it was proved to act as a great driver of desirable consumption actions through the development of consumer trust, perceived value, and purchase intention (Brodie et al., 2011; Linda D. Hollebeek & Macky, 2019).

Brodie et al.'s (2011, p. 259) affirm that consumer engagement "states occur within a dynamic, iterative process of service relationships that cocreates value".

The behaviours of videogame consumers can be classified in five categories: community engagement, purchase intent, coproduction, word-of-mouth and player recruitment (Abbasi et al., 2020).

Purchasing intent reflects the players' willingness to purchase video games, devices, accessories, or entries to esports tournaments. Co-production is the extent to which esports players are involved in the creation/development of new games. Word-of-mouth is the player's intention to share positive experiences/information about a sport or tournament. On the other hand, community engagement illustrates the interaction that the consumer has with other players within the community. Finally, player recruitment refers to the willingness consumers have to recruit friends to join a particular game or esports tournament (Algesheimer et al., 2010; L.D. Hollebeek et al., 2017).

In this research, the purchase intent category is used to verify any links or statistically significant differences within the study population.

2. **METHODOLOGY**

2.1. STUDY APPROACH

This is an exploratory case study with the objective of shedding a new light regarding the motivations of consumers to watch Counter-Strike Global Offensive. The secondary objectives are organized as follows: (a) to validate the MSES scale for CS:GO; (b) to describe and to cluster watchers of CS:GO according to their motivation profile; (c) to verify if there is a correlation between the motivation and the level of game engagement.

To do so, a quantitative approach was adopted. Even though there is a lack of literature on the actual implementation of the Motivation Scale of Esports Spectatorship (MSES), this tool was helpful not only to collect the quantitative data presented in this study, but also in helping the researcher to reach conclusions regarding the population of CS:GO's spectators.

The aim of quantitative research focuses on quantifying data and disseminating the sample results to the target population (Malhotra, 2004). In this way, this research constitutes a systematic procedure for collecting observable and quantifiable data based on the observation of phenomena, events, or facts that exist independently of the researcher (Freixo, 2011). According to this method, data can be translated into numbers, opinions, and information, which can be analysed in statistical methods (Reis, 2010).

Of the primary collection methods, the questionnaire is the one that ensures comparability, accuracy, and ease of data processing (Malhotra, 2010).

When a questionnaire is applied to an investigation, variables are assessed through elaborate questions. Thus this instrument plays a key role in the quality of the data obtained (Hill & Hill, 2009).

2.2. INSTRUMENT FOR DATA COLLECTION

This study used the Motivation Scale of Esports Spectatorship, developed by Qian et al. (2020), and allowed the researcher to analyse the 10 factors that motivate consumers to watch CS:GO esports: competitive nature, socialization opportunity, skill improvement, friends bonding, game knowledge, skill appreciation, entertaining nature, dramatic nature, competition excitement and vicarious sensation.

The survey was divided in three sections.

First, an introduction with an explanation of the theme, followed by a set of questions that aim to describe the sample of the survey such as, the gender (multiple choice with three possible answers, male, female or other), the Age (single textbox) and a question about the frequency that the participant watches CS:GO (multiple choice, if the participant checks the box "never saw" the survey was concluded because he/she does not fit the target of this study).

Second, a set of questions based on the items of the MSES was made, in which the answers where given through a 7-point Likert-type scale (1=strongly disagree to 7= strongly agree). The dimensions used on this section were COM= Competitive Nature; SOL= Socialization Opportunity; SKI = Skill Improvement;

FB = Friends Bonding; KNW = Game Knowledge; SKA = Skill Appreciation; ENT = Entertaining Nature; DRA = Dramatic Nature; EXC = Competition Excitement; VS = Vicarious Sensation.

Lastly, this section was developed to collect other data to understand the customers engagement related to some market indicators. As such, questions about their inventory on steam (number of skins and money that they have spent on CS:GO) and questions about their setup (the devices that the population use to play the game), the value of this setup and the intentions in a near future to upgrade were included.

Table 3 shows the variables that are part of the survey.

Table 3 – Survey variables

Variable	Description
Socio demographics	
GEN	Gender
AGE	Age
SEE	How often do you watch CS:GO games
MSES scale, COM dimension (competitive nature)	
COM1	I enjoy the competitive gameplay of Counter-Strike Global Offensive;
COM2	I like the competitive nature of Counter-Strike Global Offensive;
COM3	It is great to see somebody do really well against other people;
COM4	I like to watch people taking it serious against one another;
COM5	I want to see high-level competition among players;
MSES scale, FB dimension (Friends Bounding)	
FB1	Watching an CS:GO game gives me chance to bond with my friends;
FB2	I enjoy sharing the experience of watching CS:GO game with friends;
FB3	I can have a good time with friends while watching CS:GO;
FB4	atching CS:GO creates bonding moments that people can carry with them;
FB5	I enjoy watching CS:GO with friends in a social setting;
MSES scale, SOL dimension (Socialization Opportunity)	
SOL1	I enjoy interacting with other fans online when watching Counter-Strike Global Offensive;
SOL2	It allows me to meet other people online with similar interest to mine;
SOL3	It provides an online social outlet when watching Counter-Strike Global Offensive;
SOL4	I can connect with other CS:GO fans and be part of the online community;
SOL5	I enjoy interacting with streamers online and getting to know them;

SOL6	I can interact with other spectators online and get a sense of camaraderie;

MSES scale, SKI dimension (Skill Improvement)

SKI1	Watching CS:GO helps me become a better player;
SKI2	I get to learn something new from some of the best players;
SKI3	It would give me a better idea on how to win the game if I play;
SKI4	I can improve my game by looking at techniques and strategies used by the experts;
SKI5	It gives me a deeper understanding of what's possible when I play;
SKI6	It improves my own play by getting ideas from professional players;

MSES scale, KNW dimension (Game Knowledge)

KNW1	I feel my understanding of CS GO game adds to my enjoyment of watching it;
KNW2	I watch because I understand intricacies and strategies;
KNW3	I watch because what is going on in the game;
KNW4	I like watching CS:GO game because I know the ins and outs of it;

MSES scale, SKA dimension (Skill Appreciation)

SKA1	I like watching how others can do things in the game that I could never imagine;
SKA2	I watch players go to their limits and show moves that I could not typically think of;
SKA3	I like to see new moves, tricks, or techniques during a game;
SKA4	I enjoy high micro/macro skills that only the best van play during a game;

MSES scale, ENT dimension (Entertaining Nature)

ENT1	I watch CS:GO games because it is fun to watch;
ENT2	I watch CS:GO games because I want to have fun;
ENT3	I watch CS:GO because it is enjoyable to watch;
ENT4	It is a lot of fun to watch CS:GO;
ENT5	Watching CS:GO is something fun to pass time;

MSES scale, DRA dimension (Dramatic Nature)

DRA1	I enjoy the moment in a game when people make a strong comeback;
DRA2	I enjoy watching the underdogs make big breaks and upset the better ones;
DRA3	I like the fact that a game can be turned around in the very last minute;

MSES scale, EXC dimension (Competition Excitement)

EXC1	I like the excitement associated with watching CS:GO;
EXC2	I find watching CS:GO very exciting;
EXC3	I enjoy the thrill and excitement when I watch CS:GO;
EXC4	I feel hyped and excited when I watch CS:GO;

MSES scale, VS dimension (Vicarious Sensation)

VS1	I feel like I am in the game when it is close or coming down to the final moments;
VS2	I can experience how professional plays without actually investing the hours into it;
VS3	I can get a feeling of playing at a high level without actually being good at it;

Market Information

$INV	Inventory value;
NINV	Number of items in the inventory;
$SET	Setup value;
FUT	Intentions to upgrade the setup in the further months.

Since the population under study is the Portuguese population that watches CS:GO, and the MSES is written in English, a careful translation was made to better reach this population (as can be seen in Appendix 1). By calculating the sample size needed to provide trustworthy information, the researcher need more than 384 surveys, to produce a confidence level of 95% with a margin of error of 5%.

2.3. POPULATION OF INTEREST

In the Newzoo's Global esports Market Report from 2017, important information was given about the esports consumer. In 2015 the audience for esports was 235 million people, 120 million (53.3%) of which are considered esports enthusiasts (Warman, 2017).

By 2016 there was an increase in the global audience estimated at 36.6%, thus accounting for 323 million people. This growth was essentially due to occasional new viewers given that the total percentage of esports enthusiasts dropped to 50.2% concerning the previous year (Warman, 2017).

In the following year, an increase of 19.6% was registered in terms of total audience, exceeding 385 million. However, the relationship between esports enthusiasts and occasional viewers has stagnated around 191 million viewers, representing 49.7 % of the total audience (Warman, 2017).

In 2020 it was projected by Newzoo's report, a total audience of 589 million esports spectators, representing a growth of 20.1% when compared to the total audience of 2017. Within that number, 48.6% were considered esports enthusiasts and 51.4% were considered occasional viewers (Warman, 2017).

Furthermore, the study indicates that in 2016, the total population of esports enthusiasts was 191 million, where 71% were male. Plus, this study also indicates that 38% are males between the ages of 21 and 35 years old, followed by 20% males between the ages of 10 and 20 years old. Another important data taken from the same report indicates that only 2% of esports enthusiasts are between 51 and 65 years old, encompassing both males and females, each with 1% (Warman, 2017). In the same year, 194 million people were occasional viewers but, in this category, both age and gender are more equitable. In contrast, there is a clear male predominance in esports viewership, which is comprised of 118.3 million representing 61% of the total population of occasional viewers. While comparing gender and age, an important data was shown. In contrast to the other segments, male consumers between the ages of 21 and 35 years old and male consumers between the ages of 10 and 20 years old are fewer when compared to the overall esports enthusiasms (Warman, 2017).

Only 50% of the online population has a full-time job. Within that statistic, 58% of them are occasional viewers and 62% are esports enthusiastic. Registering the same trend, when we talk about "high household income", only 37% of the online population are registered in this category. However, in this

category 47% are occasional viewers while 50% are esports enthusiasts (Warman, 2017).

According to this data, the esports audience shows a trend which can be divided in two categories: occasional viewers and enthusiastic esports. However, this second segment is predominately males between the ages of 10 and 35 years old. Moreover, the data shows that in this category it is easier to find a "full-time job" and therefore have "high household income" (Warman, 2017).

This present research was focused on the Portuguese consumers who watch CS:GO. This segment allowed the researcher to have a concise sample within the overall esports community.

Despite the lack of information about Portuguese people that watch CS:GO, assumptions were made regarding this segment in order to fulfil this research purpose. As such, information about the MLP (Master League Portugal), the biggest national event that focus on CS:GO was gathered, which shows that in the finals there were more than 15 thousand viewers. Therefore, the researcher assumed that there is more than 15 thousand CS:GO viewers in Portugal. Nonetheless, it was also assumed that currently, the total number of CS:GO viewers in Portugal should not surpass more than 200 thousand viewers.

2.4. SAMPLING PROCEDURE

To facilitate the distribution, the researcher used the Google Forms tool to easily send these surveys through the Internet. Plus, word-of-mouth strategies

were used by sharing the questionnaire with friends and in CS:GO streams. This helped the researcher to reach professional players such as André "mucha" Gata (one of the best known CS:GO casters in Portugal) and Ricardo "stadodo" (one of the athletes of the "sAw" organization) as well as their fan base. As a result, the researcher was able to reach the desired number of answers.

A total of 565 questionnaires were collected, but 10 had to be excluded since they did not meet all the requirements proposed for the analysis, resulting in a total of 555 questionnaires analysed. These 10 surveys were not included in the present study since they did not meet the requirements needed, namely Portuguese people that watch CS:GO.

3. DATA ANALYSIS

The study started with the descriptive analysis of the collected data: the respondents' sociodemographic information, the items of the MSES scale, and the variables regarding their engagement with esports. Then the validation of the MSES scale was carried out, followed by the clusterization of the esports consumers according to their motivation. It was finally studied the correlation between motivation and engagement level.

The programs Excel and SPSS were used for their treatment.

Table 4 was the first analysis and refers to the descriptive data population.

Table 4 - Descriptive data population - Gender and Age

	#	%
Total	555	100.0
Male	529	95.3
Female	26	4.7
<=15	21	3.8
16-20	313	56.4
21-25	154	27.7
26-36	62	11.2
37-46	3	0.5
>=47	2	0.4

Starting with a descriptive analysis of the sample data it is possible to see that 95.3% of the respondents are male and only 4.7% are female.

As for their ages, the data shows that three major segments when grouped together make up 95.3% of the general population surveyed. Those segments are people between the ages of 16-20 years old (56.4%), people between the ages

of 21-25 years old (27.7%), and people between the ages of 26-36 years old (11.2%).

In general, this study sample reflects people who are mainly male and between the ages of 16 and 36.

After analyzing the descriptive data of the general surveyed population, an analysis of the mean and standard deviation for each item of the MSES scale was made, as well as the Cronbach's alpha for each of the factors, as can be seen in table 5.

Table 5 - Descriptive data of MSES items and Cronbach's alpha of each item

	Mean	Standard Deviation	Cronbach's Alfa
COM1	6,24	0,942	0,766
COM2	6,51	0,846	
COM3	6,53	0,875	
COM4	6,63	0,789	
COM5	6,73	0,676	
SOL1	4,52	1,925	0,895
SOL2	5,03	1,784	
SOL3	4,65	1,856	
SOL4	5,33	1,644	
SOL5	5,31	1,707	
SOL6	5,04	1,703	
SKI1	6,37	1,012	0,906
SKI2	6,53	0,854	
SKI3	6,43	0,893	
SKI4	6,53	0,822	
SKI5	6,29	0,969	
SKI6	6,42	0,93	
FB1	5,33	1,625	0,888
FB2	5,35	1,695	
FB3	5,46	1,708	
FB4	5,11	1,771	

FB5	5,12	1,834	
KNW1	6,2	1,051	0,715
KNW2	5,83	1,32	
KNW3	6	1,168	
KNW4	5,3	1,731	
SKA1	6,03	1,317	0,800
SKA2	6,01	1,257	
SKA3	6,49	0,853	
SKA4	6,11	1,274	
ENT1	6,08	1,25	0,886
ENT2	5,97	1,297	
ENT3	6,37	0,951	
ENT4	6,1	1,185	
ENT5	6,14	1,182	
DRA1	6,63	0,745	0,614
DRA2	6,06	1,238	
DRA3	6,58	0,816	
EXC1	6,56	0,816	0,904
EXC2	6,37	0,966	
EXC3	6,41	0,917	
EXC4	6,19	1,12	
VS1	5,6	1,606	0,777
VS2	4,26	2,142	
VS3	4,64	2,042	

By analyzing the mean value of each item, it is possible to generally assess the importance that respondents assigned to each item. As these values refer to an average from a Likert scale, where the minimum value is represented by 1 and the maximum value by 7, can be highlighted the following items: COM1, COM2, COM3, COM4, COM5, SKI1, SKI2, SKI3, SKI4, SKI5, SKI6, KNW1, KNW3, SKA1, SKA2, SKA3, SKA4, ENT1, ENT3, ENT4, ENT5, DRA1, DRA2, DRA3, EXC1, EXC2, EXC3 and EXC4 for obtaining averages greater than or equal to 5. These items are those that the respondents assume as super factors regarding the motivation to attend this esport.

It is important to note that the items with lower averages, are always above the neutral value, that is, items with averages around 4, as it is the case of SOL1, SOL3, VS2 and VS3.

Regarding the standard deviations it is important to note that most of the items scored below 1, meaning that there is some conformity in the respondents. However, the items previously mentioned for obtaining averages bellow 5, is where the date shows the highest values of standard deviation, surpassing the value of 2. This implies, that there is not much conformity in them on the part of this population.

Through Cronbach's alpha it was possible to evaluate the statistical convergence of the items into the factor it is inserted, and the reliability of the scale developed by Qian et al. (2020). The study shows all the variables have a perfect strength of agreement, besides that the variable DRA, its presents a value of 0.61, which cannot be seen as a perfect but as a substantial one (Landis & Koch, 1977). This may happen because this variable consists of only three items. Thus, the researcher decided to keep this data and continue with the study.

Table 6 show the answers regarding the MSES scale allows to compare and evaluate in a more detailed way the importance that the participants attributed to each of the items as can be seen in the next table.

Table 6 - Frequency answers of MSES (%)

	1	**2**	**3**	**4**	**5**	**6**	**7**
COM1	0,2	0,2	0,7	4	14,4	30,5	50,1
COM2	0,4	-	0,5	2,3	7,6	22,9	66,3
COM3	0,4	0,7	-	2,2	6,7	21,6	68,5
COM4	0,4	0,2	0,2	2	5,2	16,6	75,5
COM5	-	0,2	-	2,2	4,7	10,1	82,9
SOL1	9	9,2	10,6	20,7	16	11,5	22,9
SOL2	4,3	7,2	8,6	16,2	17,3	17,5	28,8
SOL3	8,1	7,6	9,5	18,6	21,3	12,6	22,3
SOL4	2,9	4,3	6,3	15,9	19,5	16,8	34,4
SOL5	4	3,8	7,2	15,5	16,6	17,7	35,3
SOL6	4,1	5,4	10,8	14,1	20,2	18	27,4
SKI1	0,5	0,4	0,9	3,6	11,5	20,7	62,3
SKI2	0,2	0,4	0,5	2,7	6,3	21,4	68,5
SKI3	0,4	0,2	0,5	1,8	11,7	23,2	62,2
SKI4	0,2	0,2	0,4	2,2	8,1	20,7	68,3
SKI5	0,4	0,2	0,4	4,3	14,2	24,9	55,7
SKI6	0,2	0,4	0,9	2,9	10,6	21,4	63,6
FB1	3,2	4	6,5	13,5	20,2	21,1	31,5
FB2	4	4,1	6,3	14,2	15,5	21,4	34,4
FB3	4,7	4,1	3,4	12,4	17,5	19,1	38,7
FB4	5,2	5	8,3	13,7	21,4	15,7	30,6
FB5	7,2	4,3	6,5	13,5	19,3	17,7	31,5
KNW1	0,4	0,9	0,4	5	15,5	26,1	51,7
KNW2	0,9	1,3	3,8	9,7	19,1	23,1	42,2
KNW3	0,7	0,5	1,4	8,5	17,8	26,1	44,9
KNW4	5,4	3,8	4,3	15,3	18,2	18,9	34,1
SKA1	2	0,9	2,5	5,2	15,3	23,8	50,3
SKA2	1,6	0,5	2,7	5,9	14,8	28,6	45,8
SKA3	0,4	-	0,5	2,2	8,6	22,9	65,4
SKA4	2	0,4	1,4	6,8	13,7	21,8	53,9
ENT1	1,3	0,5	2,3	7,2	14,4	22,2	52,1
ENT2	1,4	1,1	1,4	9	17,1	21,4	48,5
ENT3	0,4	0,4	0,5	3,6	10,5	25,4	59,3
ENT4	0,5	1,1	1,3	8,1	14,8	22,3	51,9
ENT5	1,4	0,5	0,9	5,2	15,5	24,1	52,3
DRA1	-	0,2	0,2	2,3	6,1	16,4	74,8
DRA2	0,5	0,7	2,2	10,5	13,9	18,9	53,3
DRA3	0,2	-	0,5	2,7	7	16,2	73,3
EXC1	0,2	-	0,7	2,3	6,8	18,9	71
EXC2	0,5	0,2	0,4	3,1	13,7	21,1	61,1
EXC3	0,4	0,4	0,4	2,2	12,3	22,7	61,8
EXC4	0,5	1,3	0,7	4	17,8	20,7	55
VS1	4,1	2,2	3,2	11,9	17,8	20	40,7
VS2	17,7	7,6	11,9	13,7	15	11,9	22,2
VS3	11,4	7,4	12,1	11,7	16,2	14,8	26,5

Within the COM motivation, which is composed of five variables, there is a low presence of negative responses, that is, values equal to or less than 3 are very low or almost null. However, COM5 shows a value of only 0.2%, implying that respondents had more negative answers in this variable.

Nonetheless, the COM motivation, shows a positive ascendancy in all variables, since 95% or more responded with positive values (equal to or greater than 5). Similarly, it is still important to highlight that most respondents assigned the maximum value to these variables (7).

In the SOL motivation, comprised of six variables, shows a more significant discrepancy between the values attributed by the respondents. To illustrate, the answers with negative values present results that vary between 28.8% and 13.5%. On the other hand, responses with positive values (equal to or greater than 5) express results that range between 65.2% and 70.7%. It is still important to emphasize that the mode in these answers lie in the value 7.

Furthermore, SKI motivation is composed of six variables, and shows very consistent results, since only 0.8% out of 1.8% responded negatively to the variables in question. Moreover, between 94.5% and 97.1% of respondents gave positive values to these same variables. Similarly, to the variables COM and SOL, most responses lie in the value 7.

Similarly to SOL, the FB motivation is one of the MSES elements that showed the most disagreement among the respondents. Although the vast majority (between 67.7% and 72.9%) attributed values equal to or greater than

5, the negative values were higher than the other elements previously analysed, varying between 12.2% and 18.5%.

In regards to the KNW motivation, it should be noted that the negative values vary between 1.7% and 2.6%, so there was a more significant discrepancy attributed by respondents. Plus, it was found that 13.4% indicated this item as not being one of their personal motivations. Yet, the vast majority are represented as positive values (ranging from 71.2% to 93.3%), but the maximum value(7), only achieved the majority in the KNW1 variable.

In the SKA motivation, the respondents' answers were mainly positive, with percentages between 89.2% and 96.9%. However, the SKA3 variable was the only one that did not obtain answers that reached the absolute majority, remaining only at 45, 8%. Regarding negative responses, their frequencies vary between 0.9% and 5.4%.

The ENT motivation shows that the respondents' answers mainly were attributed to positive values (between 87% and 95.2%). Nontheless, the ENT2 variable did not get answers that reached the absolute majority, reaching only 48, 5%. Regarding negative responses, their frequencies vary between 1.3% and 4.1%.

The DRA motivation is the motivation that showed the least amount of negative values, ranging between 0.4% and 3.4%. The vast majority of the answers reside in the maximum value (7), implying that most respondents are in complete agreement with this statement. The positive values referring to this motivation vary between 86.1% and 93.5%.

Likewise, DR. the EXC motivation demonstrates a low presence of negative values ranging between 0.9% and 2.5%, since most answers given were the value 7. This shows the excellent agreement and importance of this motivational factor. The positive values of this motivation range between 93.5% and 96.8%.

Finally, the VS motivation, showed a significant disagreement in the respondents, with VS2 and VS3 resulting as the variable with the highest frequency of negative responses, obtaining values of 37.2% and 30.9%, respectively. In comparison, VS1 had a much lower number of negative responses (9.5%).

After the descriptive analysis, it was designed a cluster analysis using the k-means process, where the cut-off points were analysed. What constitutes a good cluster is its application and the methodologies used to find these clusters subject to various criteria, whether ad hoc or systematic (Kanungo et al., 2002). Firstly, the study began by finding three distinct clusters, but the following methodology did not provide statistically viable data, so it was decided to split the sample in two clusters. The first one is made up of 312 people, while the second one is made up of 243. This grouping already provided data that could be statistically viable to continue the study in question.

Table 7 compares the mean score for each of the ten factors, using a 95% confidence interval.

Table 7 – Confidence Interval of each Cluster regarding the motivation factors of MSES (mean and standard deviation)

Variable			Cluster 1	Cluster 2
COM	**Mean**		6,6795	6,3325
	Std Deviation		0,46687	0,68398
		Lower L.	6,6275	6,2461
	95% confidence interval for mean	**Upper L.**	6,7315	6,4189
SOL	**Mean**		5,7452	3,9938
	Std Deviation		1,09636	1,21282
		Lower L.	5,6231	3.8406
	95% confidence interval for mean	**Upper L.**	5,8673	4,1471
SKI	**Mean**		6,6811	6,1029
		Lower L.	6,6266	5,9891
	95% confidence interval for mean	**Upper L.**	6,7356	6,2166
	Std Deviation		0,4895	0,90017
FB	**Mean**		6,134	4,1704
	Std Deviation		0,84099	1,28131
		Lower L.	6,0403	4,0085
	95% confidence interval for mean	**Upper L.**	6,2277	4,3323
KNW	**Mean**		6,2821	5,2521
	Std Deviation		0,74649	0,95319
		Lower L.	6,1989	5,1316
	95% confidence interval for mean	**Upper L.**	6,3652	5,3725
SKA	**Mean**		6,4928	5,7325
	Std Deviation		0,63757	1,08567
		Lower L.	6,4218	5,5953
	95% confidence interval for mean	**Upper L.**	6,5638	5,8697
ENT	**Mean**		6,4891	5,6749
	Std Deviation		0,72414	1,06569
		Lower L.	6,4084	5,5402
	95% confidence interval for mean	**Upper L.**	6,5698	5,8096
DRA	**Mean**		6,6581	6,1262
	Std Deviation		0,53655	0,81062
		Lower L.	6,5984	6,0238
	95% confidence interval for mean	**Upper L.**	6,7179	6,2286
EXC	**Mean**		6,738	5,928
	Std Deviation		0,46895	0,99428
		Lower L.	6,6857	5,8023
	95% confidence interval for mean	**Upper L.**	6,7902	6,0536
VS	**Mean**		5,7105	3,7078
	Std Deviation		1,21083	1,3549
		Lower L.	5,5756	3,5366
	95% confidence interval for mean	**Upper L.**	5,8453	3,879

The confidence interval graphs are illustrated in the Appendices 2 to 13, which were analysed to compared the clusters for each factor of the MSES scale. Since none of the graphs overlap in any of the scale factors, as can be seen in the attached tables, can be state that the two clusters are statistically different.

Nevertheless, the biggest difference between both clusters remains in the items SOL, FB and VS.

This way, Cluster 1 can be classified as the group of viewers who feel that this esport has an important weight in their social life and who use this medium to communicate among their group of friends and meet new people.

While Cluster 2 can be classified as the group of people who give more value to the competition part, entertainment, knowledge, and less value to the social aspect of it.

The next step was to evaluate if the variables referring to the level of engagement can be differentiated according to clusters that were previously found. This was achieved through the use of cross tables compiling the cluster information and the answers given the survey's section 3, as shown in Tables 8 to 12.

The statistical validation was provided by Pearson's Chi Square. The p-value is a probability that results from a statistical test. This probability reflects the power of the test against the null hypothesis, so if the p-value is below a predefined limit, the results are designated as statistically significant (Prel et al., 2009). In this study, a p-value of less than 0.05 was considered statistically significant. It then indicates strong evidence against the null hypothesis of no

relation between the variables, as less than 5% of the probability is correct (McLeod, 2020).

Table 8 shows the distribution of the variable NINV in each Cluster.

Table 8 - Distribution NINV in each Cluster

			Clusters		
			1	2	Total
NINV	Lower than 5	Total number of cases	35	50	85
		% of cases per cluster	11,2%	20,6%	15,3%
	Between 5 and 20	Total number of cases	124	86	210
		% of cases per cluster	39,7%	35,4%	37,8%
	More than 20	Total number of cases	153	107	260
		% of cases per cluster	49,0%	44,0%	46,8%
	Total	Total number of cases	312	243	555
		% of cases per cluster	100%	100%	100%
		P-value			0,010

Through this table it is possible to see that the p-value is 0.010, proving a statistical difference between the clusters when comparing them according to the number of items they have in their inventory.

Moreover, the table also shows that in both clusters the bigger groups (49% in cluster 1 and 44% in cluster 2) has more than 20 items in their inventory.

However, it is noteworthy to point out that in Cluster 1 there is a greater discrepancy between the answers of "Lower than 5" and "Between 5 and 20" than the ones shown by Cluster 2.

Table 9 shows the distribution of the variable INV in each Cluster.

Table 9 - Distribution INV in each Clusters

			Clusters		
			1	**2**	**Total**
INV	**Lower than 20€**	Total number of cases	122	123	245
		% of cases per cluster	39,1%	50,6%	44,1%
	Between 20€ and 100€	Total number of cases	101	61	162
		% of cases per cluster	32,4%	25,1%	29,2%
	More than 100€	Total number of cases	89	59	148
		% of cases per cluster	28,5%	24,3%	26,7%
	Total	Total number of cases	312	243	555
		% of cases per cluster	100%	100%	100%
		P-value			0,024

Following the same trend as the table shown before, the INV Distribution table shows a p-value of 0.024, which also proves a statistical difference between the clusters when comparing them in regard to their inventory value.

Although in both clusters the highest percentages underlined the answer "lower than 20€", in Cluster 1 a greater equality is found when comparing this group inventory value of the inventory. Likewise, Cluster 2 also shows that the vast majority has an inventory worth less than 20€. However, the percentages showed for the answers "between 20€ and 100€" and "more than 100€", are much more homogeneous.

Table 10 shows the distribution of the variable SET in each Cluster.

Table 10 - Distribution SET in each Cluster

			Clusters		
			1	**2**	**Total**
SET	**Lower than 500€**	Total number of cases	42	30	72
		% of cases per cluster	13,5%	12,3%	13,0%
	Between 500€ and 1200€	Total number of cases	123	122	245
		% of cases per cluster	39,4%	50,2%	44,1%
	Between 1200€ and 2000€	Total number of cases	114	75	189
		% of cases per cluster	36,5%	30,9%	34,1%
	More than 2000€	Total number of cases	33	16	49
		% of cases per cluster	10,6%	6,6%	8,8%
	Total	Total number of cases	312	243	555
		% of cases per cluster	100%	100%	100%
		P-value			0,058

Even though, this table is the one with the least statistical power since the p-value is 0.058, it is still relevant to consider since it shows the values of the consumer's setup. The smallest plots, in both clusters, refer to the extremes, that is, people with setups less than 500€ and setups over 200€.

However, the big difference in this table is that most people in Cluster 2 have a setup value of 'between 500€ and 1200€' (50,2%), whereas in Cluster 1 there is a very equal percentage of people with setups valuated 'between 500€ and 1200€' (39,4%) and 'between 1200€ and 2000€' (36,5%).

Therefore, it is possible to assume that people in Cluster 1 place more importance on having a better setup when compared to people who belong to Cluster 2.

Table 11 shows the distribution of the variable FUT in each Cluster.

Table 11 - Distribution FUT in each Cluster

			Clusters		
			1	**2**	**Total**
FUT	**Not expecting to do changes in their setup soon**	Total number of cases	148	154	245
		% of cases per cluster	47,4%	63,4%	54,4%
	Expecting to do small changes in their setup soon	Total number of cases	102	55	157
		% of cases per cluster	32,7%	22,6%	28,3%
	Expecting to do big changes in their setup soon	Total number of cases	62	34	96
		% of cases per cluster	19,9%	14,0%	17,3%
	Total	Total number of cases	312	243	555
		% of cases per cluster	100%	100%	100%
		P-value			0,001

The table represents the answers given in the survey regarding the consumer intentions to upgrade their setup. In it, is also possible to see a difference between both clusters, since the p-value is 0.001.

By analysing the data, the researcher found that the majority of people inquired from Cluster 2 (63.4%) do not intend to make any setup changes in the near future. This table also shows that 14% of people in this cluster are "Expecting to do big changes in their setup soon" and 22,6% are "Expecting to do small changes in their setup soon".

By contrast, in Cluster 1 the vast majority of people inquired want to make changes in their set up, since the aggregation of the categories "Expecting to do small changes in their setup soon" and "Expecting to do big changes in their setup soon" represent 52.6% of this cluster.

Table 12 shows the distribution of the variable SEE in each Cluster.

Table 12 - Distribution SEE in each Cluster

			Clusters		
			1	**2**	**Total**
SEE	**Frequently**	Total number of cases	263	177	440
		% of cases per cluster	84,3%	72,8%	79,3%
	Occasionally	Total number of cases	46	53	99
		% of cases per cluster	14,7%	21,8%	17,8%
	Rarely	Total number of cases	3	13	16
		% of cases per cluster	1,0%	5,3%	2,9%
	Total	Total number of cases	312	243	555
		% of cases per cluster	100%	100%	100%
				P-value	0,000

Through this table it is possible to analyse the frequency in which the population watches CS:GO competitive games. Moreover, the table shows a p-value of 0.000 which also proves the statistical differences between both clusters.

Also, it is possible to see that most people inquired in both clusters "Frequently" watch competitive games of CS:GO (84,3% in Cluster 1 and 72,8% in Cluster 2).

It is also important to mention that only 2,9% of the entire population "Rarely" watches competitive CS:GO games.

CONCLUSIONS

This research aimed to understand the motivations of Portuguese consumers to watch the videogame Counter-Strike Global Offensive, to cluster consumers according to their motivation, and to correlate the motivation cluster with and the level of game engagement.

Using a sample of 555 Portuguese consumers of CS:GO, the MSES scale was validated. Moreover, it was found that the most relevant factors are competitive nature, socialization opportunity, friends bounding, skill improvement, game knowledge, skill appreciation, entertaining nature, dramatic nature, and competition excitement. In contrast, Portuguese consumers of CS:GO do not value that much the factor Vicarious Sensation.

With the K-means process, it was possible to find two distinct clusters. Cluster 1 is composed by consumers that values all the motivations factors proposed by the MSES scale and cluster 2 that although values most of the same motivations, it attributes less importance to the social factors, i.e., SOL and FB.

The big difference between these two clusters is not only shown through motivational factors, but also through the level of engagement, the value of inventory and setups, and the intentions to make future improvements to their setups. It was demonstrated that Cluster 1 is the group of consumers who watch Counter-Strike Global Offensive the most, have the highest values of inventories and setups, and at the same time intend to make the most improvements to them.

In this way, the chat shows itself to be where the people who are most willing to buy meet, discuss different topics, and advise products or services, through these interpersonal interactions — making this the ideal place for companies to advertise themselves.

Future academic recommendations would be interesting to understand the differences between Counter-Strike Global Offensive consumers and consumers of other esports. This way, it would be remarkable for companies to position themselves correctly in the different esports if there are significant differences. At the same time, it would be interesting to make an intensive study on the general population of esports to understand which motivations, in a broad grouping, these consumers attribute more value to. On the other hand, given that the female population is relatively scarce in this study, it would also be fascinating to carry out in-depth research to understand what drives this populace to be present in this world of Counter-Strike Global Offensive and others esports.

Regarding managerial recommendations, the presence on socialization platforms should be highlighted. The consumer group that values more socialization motivation is the one that is more involved in esports. This way, understanding how to better use the communication channels become more valuable and a crucial point for companies to advertise their products/services in an efficient way. For example, since Twitch is the platform that brings together the most significant number of people belonging to this target audience, it would be interesting in the peaks of affluence to a particular streamer, a presence of a company that clarifies its doubts directly with the consumers. In a kind of open

conversation between them, the viewers, and the streamer. That could help the company to understand the strengths and weaknesses of their product, from their consumers' point of view, while at the same time offering them the chance to show their opinion, demonstrating that company care about this community.

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APPENDICES

Appendix 1- Survey conducted in Portuguese

Variable	Questions
Secção 1	
GEN	Género
AGE	Idade
SEE	Com que frequência costumas assistir a jogos de CS:GO?
Secção 2	
COM1	Gosta da scene competitiva do CS:GO;
COM2	Gosto da natureza competitiva do CS:GO;
COM3	É gratificante ver alguém a ter uma boa performance perante outros jogadores;
COM4	Gosto de ver pessoas a jogar seriamente contra os seus oponentes;
COM5	Quero ver competições de alto nível entre jogadores;
FB1	Assistir a CS:GO dá-me oportunidade de criar ligações com os meus amigos.
FB2	Gosto de partilhar experiências enquanto assisto a jogos de CS:GO com amigos.
FB3	Passo um bom tempo com amigos enquanto assisto a CS:GO.
FB4	Assistir a CS:GO cria momentos de ligação que as pessoas levam para vida.
FB5	Gosto de assistir a CS:GO com amigos num ambiente social.
SOL1	Gosto de interagir com outros fãs online enquanto assisto a jogos de CS:GO.
SOL2	Permite-me encontrar pessoas online com interesses semelhantes ao meu.
SOL3	Assistir a CS:GO fornece-me uma saída social online.
SOL4	Posso me conectar com outros fãs de CS:GO e fazer parte da comunidade online.
SOL5	Gosto de interagir com streamers online e conhecê-los.
SOL6	Posso interagir com outros espectadores online e ter uma sensação de convívio.
SKI1	Assistir a CS:GO ajuda-me a tornar um melhor jogador.
SKI2	Aprendo algo novo quando assisto aos melhores jogadores.
SKI3	Assistir a CS:GO dá-me melhores ideias de como ganhar quando jogo.
SKI4	Posso melhorar o meu jogo por assistir às técnicas e estratégias usadas pelos profissionais.
SKI5	Permite-me ter conhecimento profundo do que é possível acontecer enquanto jogo.
SKI6	Melhoro as minhas jogadas tirando ideias dos jogadores profissionais.
KNW1	Sinto que a minha compreensão sobre CS:GO aumenta o meu prazer quando assisto ao mesmo.
KNW2	Eu assisto porque entendo as estratégias e as complexidades envolventes do jogo.
KNW3	Assisto devido ao que se passa durante o jogo.
KNW4	Assisto a CS:GO devido a conhecer os prós e contras do mesmo.
SKA1	Gosto de ver como os outros conseguem fazer coisas no jogo que eu nunca poderia imaginar.

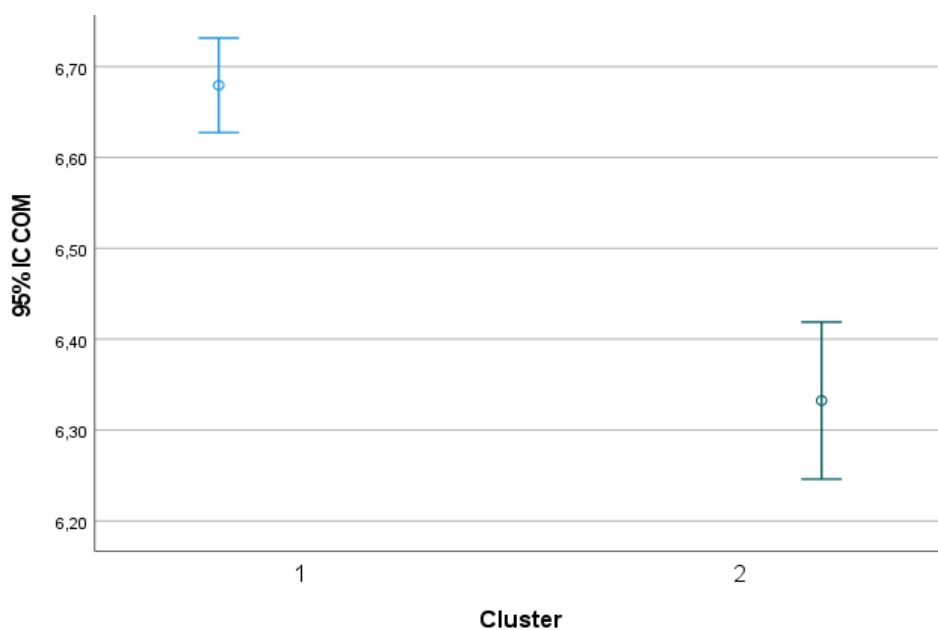|	
SKA2	Eu vejo os jogadores chegarem aos seus limites e mostrarem movimentações que eu normalmente não poderia imaginar.
SKA3	Gosto de ver novas movimentações, truques ou técnicas durante um jogo.
SKA4	Gosto de habilidades micro/macro que apenas os melhores conseguem executar.
ENT1	Assisto a jogos de CS:GO porque acho que são divertidos.
ENT2	Assisto a CS:GO porque me quero divertir.
ENT3	Assisto a CS:GO porque é agradável.
ENT4	É muito divertido assistir a CS:GO.
ENT5	Assistir CS:GO é divertido para passar o tempo.
DRA1	Gosto do momento onde os jogadores proporcionam uma grande reviravolta.
DRA2	Gosto de ver os não favoritos superarem e eliminarem os favoritos.
DRA3	Gosto de que um jogo possa ser disputado até á última ronda.;
EXC1	Gosto da emoção quando assisto a CS:GO.
EXC2	Assistir a CS:GO é muito empolgante.
EXC3	Gosto da emoção e entusiasmo quando assisto a CS:GO.
EXC4	Sinto-me empolgado quando assisto a CS:GO.
VS1	Sinto que faço parte do jogo quando o mesmo está perto de chegar aos momentos finais.
VS2	Posso experimentar como o profissional joga sem realmente investir horas nisso.
VS3	Assistir a CS:GO pode proporcionar-me a sensação de jogar ao mais alto nível sem realmente ser bom nisso.
Secção 3	
$INV	Qual é o valor do teu inventário de CS:GO?
NINV	Qual é o número de itens que tens no teu inventário?
$SET	Qual é o valor do teu setup?
FUT	Qual é a tua intenção de compra, para melhorar o teu setup, no próximo mês?

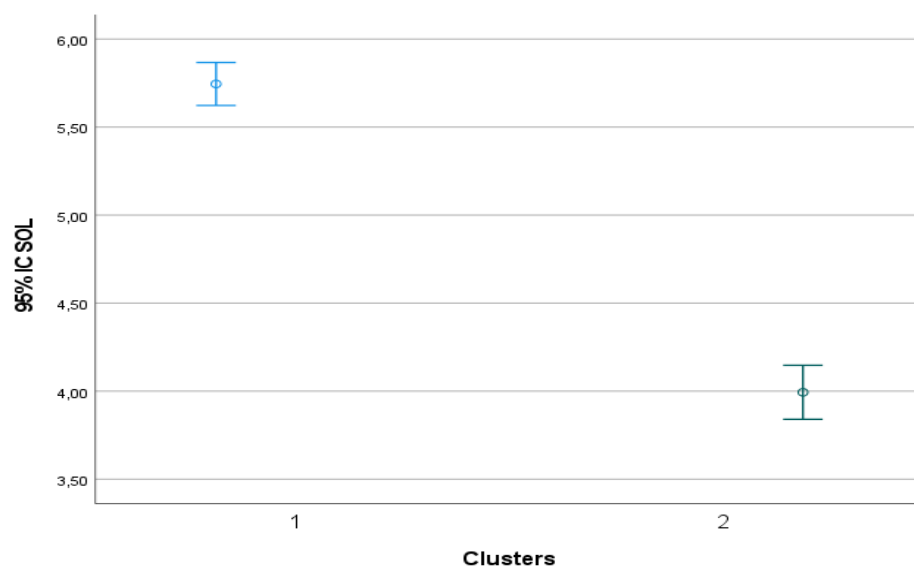*Appendix 2 - Clusters - Confidence Interval of variable AGE*

Appendix 3 - Clusters - Confidence Interval of variable SEE
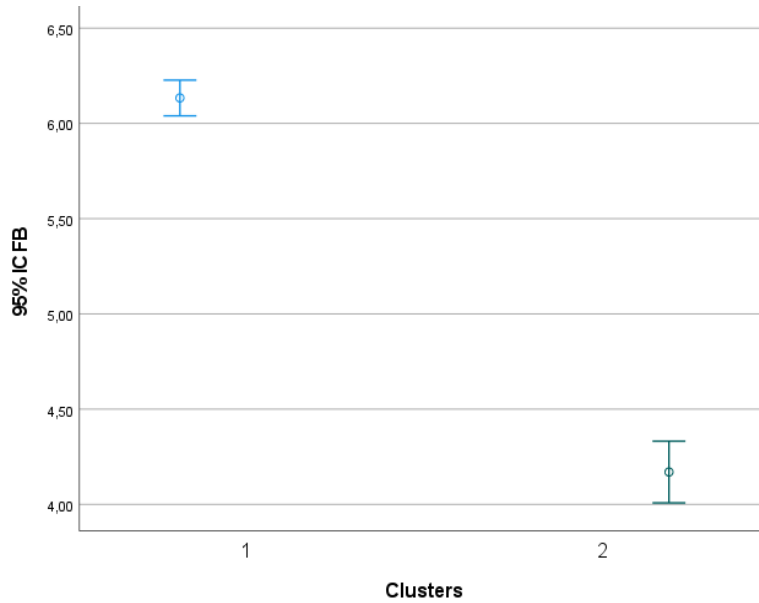
Appendix 4 - Clusters - Confidence Interval of variable COM
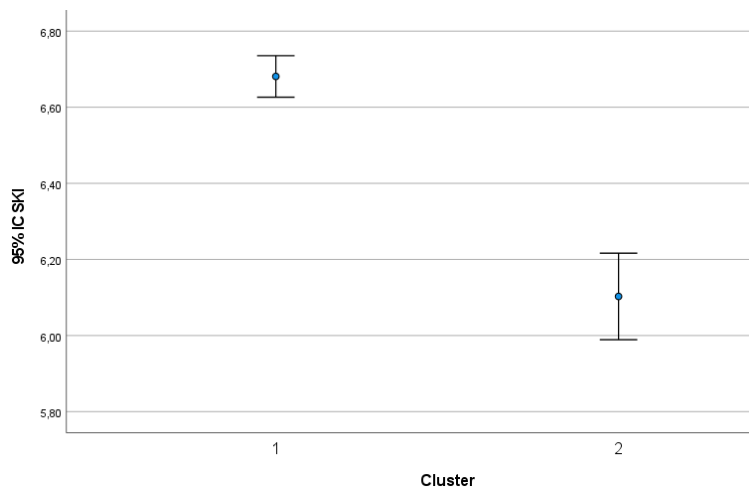

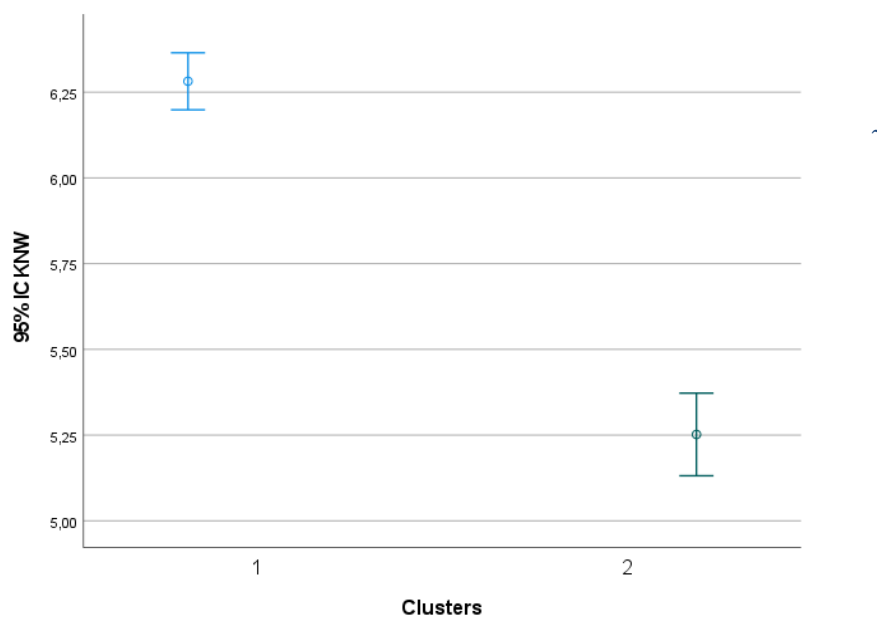*Appendix 5 - Clusters - Confidence Interval of variable SOL*
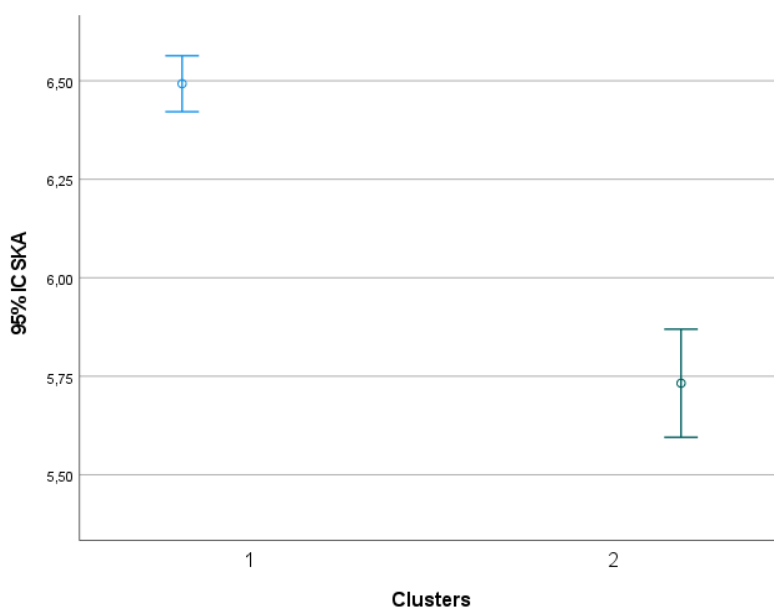
Appendix 6 - Clusters - Confidence Interval of variable FB

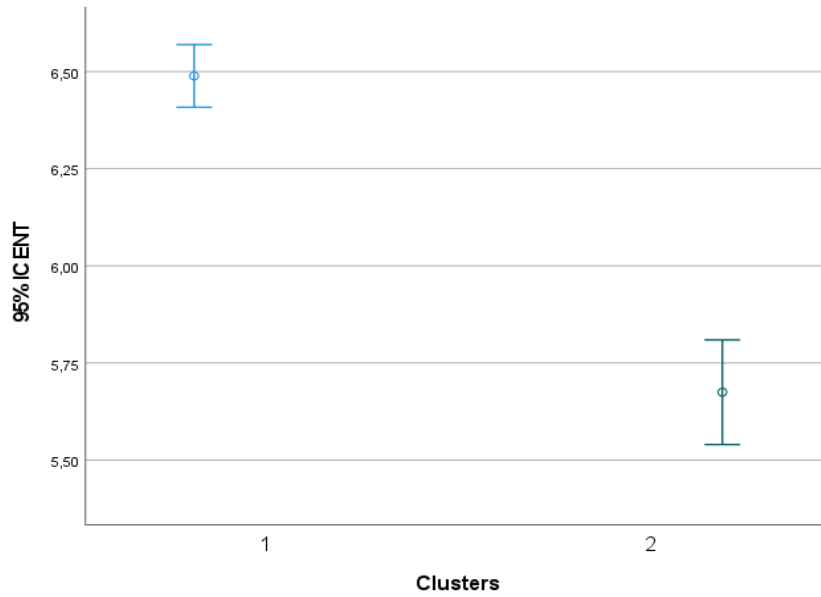*Appendix 7 - Clusters - Confidence Interval of variable SKI*
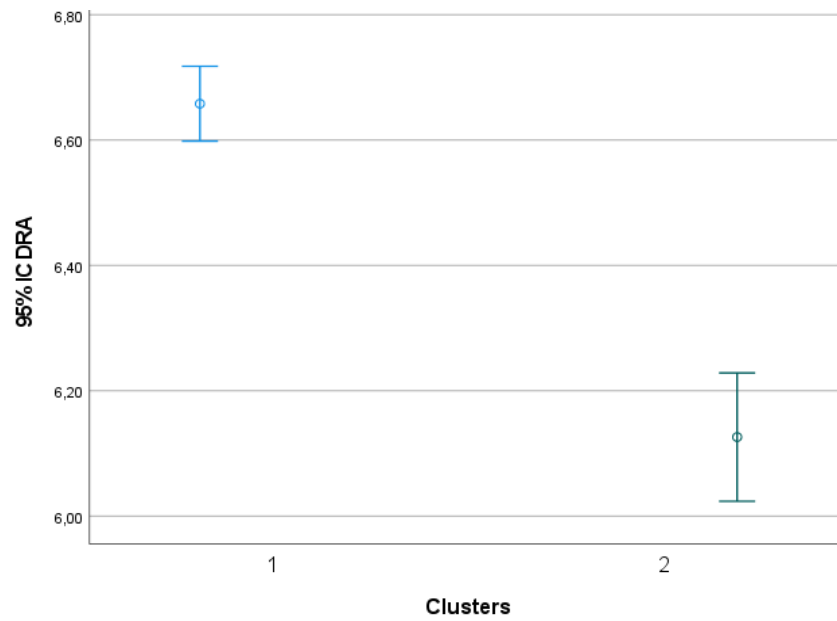
Appendix 8 - Clusters - Confidence Interval of variable KNW

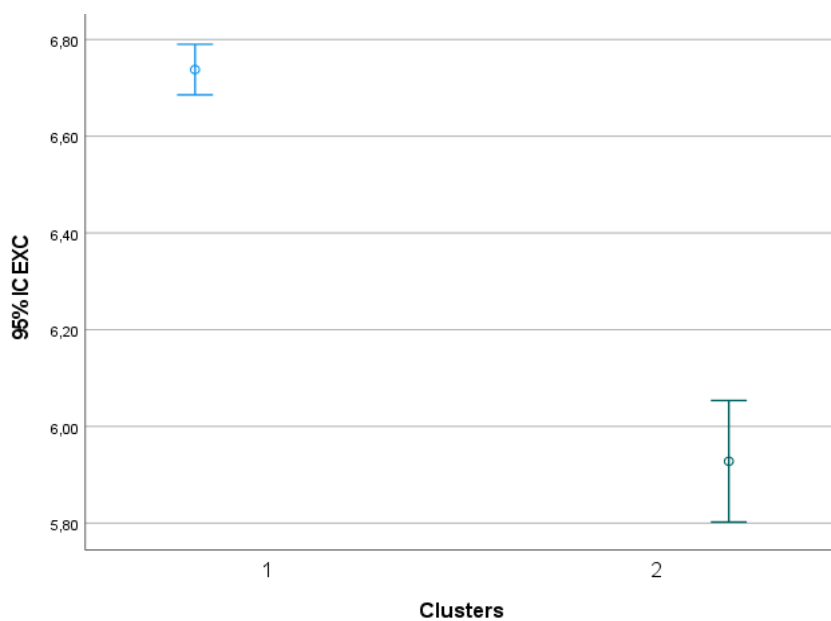*Appendix 9 - Clusters - Confidence Interval of variable SKA*

Appendix 10 - Clusters - Confidence Interval of variable ENT

Appendix 11 Clusters - Confidence Interval of variable DRA

Appendix 12 - Clusters - Confidence Interval of variable EXC

Appendix 13 Clusters - Confidence Interval of variable VS