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Sport Corruption: The Case of doping in eSports

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Abstract

The evolution of eSports into platforms that are competitive and that simultaneously link millions of players and spectators through online environments had opened up more opportunities for internal and external corruption. It is very important to explore and understand this issue. There are little data and a lot of confusion on what identifies as doping, the motives, how the player is drawn into such act, and what are the consequences of such corruption. Therefore, the aim of this study is to analyse eSports perceptions when it comes to doping in order to know the threats that will be on the integrity of eSports. The study is an interpretive in nature and qualitative-oriented and conducted twenty online interviews with eSports players. The eSports players were asked about their knowledge on eDoping techniques, views on ADHD drugs, reasons behind why a player dopes, and whether there is any education or laws in that matter that they are aware off. The results of this study pointed out four main themes that doping in eSports is all about: (a) Unfair Affairs, (b) Uncertain Seriousness, (C) Just Winning, and (d) Unspecified Territory. As such, the recommendations put forward relate to these themes are educating players, stricter laws and regulations, being more persistent and harsh, creating an organized banning system, an up-to-date anti-cheating system, and hunting down cheating websites.

Key words: *corruption, eSports, doping, eDoping*

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Introduction

1.1 Introduction and Purpose

The purpose of this chapter is to provide a background to the research. It does so by placing it in sport and eSport context in relation to corruption specifically doping. The research question that guides this study, along with the aim and objectives, is then given. Finally, the structure of the thesis is provided.

1.2 Background to the research

1.2.1 Corruption in Sport

Sport is a source of unity for millions of people around the world as it about ethics, morals, and teamwork as it brings people with different backgrounds, cultures, and beliefs together in harmony. However, corruption is not a new concept as it has been happening for so long and dates back to 88 B.C. during the Olympic Games, where the boxer Eupolos of Thessalia successfully bribed three of his competitors in the combat tournament (Maennig, 2008). Corruption in sports is any type of competitive damage made that is viewed as against law, unjust, or dishonest (Nica & Potcovaru, 2014). According to McLaren (2008), corruption occurs and takes part in all professional sport, where the money and request are significant. With the continuous growth in the sports industry and the billions of dollars generated, crime and corruption started to happen more (Lastra, Bell, & Bond, 2016). Nowadays, sports bodies, clubs, teams, and law enforcement agencies are dealing with different types of corruption threats whether it was match-fixing, illegal betting, or the use of drugs to improve the performance and image (Misra,

Anderson, & Saunders, 2013). Bures (2008) had mentioned that almost EUR 2.5 billion were spent in the FFIA World Cup in 2016 on advertising and that the sports industry generates between 2.5 and 3.5 of a country's GDP. However, it is very difficult to determine whether corruption took place or not as it is not easy to figure out whether an athlete/team intentionally did not perform well, just threw the game, or there are reasons behind the slacking (Andreff, 2016).

1.2.2 The Emergence of eSports

Throughout the last five decades, video games have gone through many changes and developments starting from being standalone games such as Space Marines (1962) and Pong (1972) to becoming collaborative and competitive games played through multiplayer online environments, where millions of players can play against in-game non-player enemies or each other (Bányai, Griffiths, Király, & Demetrovics, 2019). Being a mixture of technology and sport, eSports is an area of sports activities in which the player develops and trains his/her mental or physical abilities while using information technologies (Wagner, 2006). However, what makes eSports classified as the traditional sport is the personal choice of whether to play or not, having events which are organized and by a governed rules, being a competition that has a winner and a loser, requiring skills, and a large number of people following the streaming platforms (mainly Twitch and YouTube) (Bányai, Griffiths, Király, & Demetrovics, 2019). Taylor (2012) also added that the professional eSports players could be compared to the traditional sports athletes due to both need training, practicing, and having similar physical and mental states. On the other hand, one difference is related to the injuries where it is common for eSports players to have wrist and hand injuries and a blood clot in the knee (DiFrancisco-Donoghue, Balentine, Schmidt, & Zwibel, 2019). Regardless of this, the global eSports

market generated a revenue of $1.1 billion in 2019, where 82% of the market revenue was brand investments such as sponsorships in addition to an increase in the global eSports audience reaching 453.8 million viewers made up from eSports enthusiastic and occasional viewers (Pannekeet, 2019). As a result, eSports became one of the most rapidly developing sectors of entertainment yet, many corruption cases had emerged and were seen whether it was doping, gambling, or other types (Holden, Rodenberg, & Kaburakis, 2017).

1.3 Research Question

For this dissertation, the focus will be on a particular case of corruption: doping. Doping in eSports is important to be explored and understood, as there is not enough data on what can be considered as doping in eSports. Accordingly, the following research question for this dissertation emerges:

"**Is doping a potential threat to the integrity of eSports?'**

1.3.1 Research Aim

Based on the above question, the study aims is to analyse eSports perceptions when it comes to doping to know the threats that will be on the integrity of eSports. Therefore, this dissertation will explore the 'old phenomenon' of doping within the 'new phenomenon' of eSports.

1.3.2 Research Objectives

The following objectives have been set to serve as a *road map* towards meeting the above-stated research aim:

- To identify types of doping in the eSports context.
- To explore how the players use those doping mechanisms during the games.
- To state how different types of doping serve different functions.

- To offer practical recommendations of how doping can be tracked, managed, and what consequences can be put in this regard.

1.4 Structure of the Thesis

The dissertation is organized into five chapters. This introductory chapter (**Chapter One**) has set the scene in which the research unfolds.

Chapter Two of the research is titled as the literature review where it will explain first the corruption in the context of doping when it comes to the traditional sport. Second, there will be an explanation of the meaning and background of eSports, its structure, market, players, games and genres, and what could be identified as doping, eDoping, and the drugs used. After that, there will be an explanation about the existing literature on different types of corruption in eSports, which is related to forms of gambling, betting, and match-fixing. Later on, scandal cases and integrity issues on different types of corruption that had happened in eSports will be presented. Lastly, the theory that has been used to connect doping with eSports from the previous literature will be explained.

Chapter Three details *how* the research was conducted. The chapter is titled as Methodology and has a sub-section on research ethics. The methodology of this research helped in providing the research design of the research and in addition to explaining in detail the meaning, advantages, disadvantages, and the characteristics of qualitative design. There is also a description of explanatory and interpretive methods as they are used as part of the research. Moreover, this chapter mentioned the advantages and disadvantages of the data collection technique that was used, which was in-depth interviews. After that, the study population and sample were stated with an explanation of the participation criteria, who were targeted, and the names of the ranks. Lastly, the

steps of gaining access and data analysis that had been followed and ethical considerations that took place before the interviews were stated.

Chapter Four presents the results and the discussion of the research. This chapter aims to show how the results obtained are with significance to the research question and is divided into two parts. The first part presents the results in a logical sequence including the background information of the research participants, the template analysis used, and the themes that were emerged. The second part is about discussing and explaining the results obtained placing the findings in critical conversation with relevant literature on the research topic that is under examination. After that, the limitations faced are mentioned.

Finally, **Chapter Five** concludes and provides a brief synopsis of the study including (a) reflection on the importance of the study (b) the methods used and the findings obtained (d) highlighting its contributions to the eSports research domain and (e) offering future practical recommendations based on the study's findings in the area of doping in eSports. This chapter is titled as Conclusion.

Chapter 2

Literature Review and Theoretical Underpinnings

2.1 Introduction and Purpose

The purpose of this chapter is to critically discuss the most relevant literature on the matter and to offer the theory that underpins the present study. Several concepts will be discussed to help in explaining and embracing the possibilities that eSports provides to understand this evolution and provide guidance. First, it will be about the corruption of the traditional sport specifically when it comes to doping. After that, corruption in eSports will be discussed in detail. Lastly, the theoretical underpinnings of this study will be mentioned.

2.2 Corruption: an 'Old Phenomenon'

2.2.1 What is Corruption?

Transparency International (2013) had defined corruption in a general form and stated that corruption is "the exploitation of trusted power for personal gain". Myint (2000) views corruption as the base of economic, political, and institutional weaknesses and limitations in a country. However, both meanings categorize corruption as pettiness and fraud.

2.2.2 Corruption in Sport

Corruption in sport has become more popular throughout the years as many individuals, corporates, and entities want to take advantage of the profit that can be made. Corruption in sport context is defined according to Gorse and Chadwick (2010) as "any illegal, dishonest or unethical activity that attempts to purposely change the result or any aspect of a sporting contest to have a personal gain by one or more people involved in that

activity". According to Kihl, Skinner, and Engelberg (2017), corruption ranges from simple bribe to multinational crime groups wanting to manipulate different sporting events across the world leading to sanctions, bad reputations, loss of sponsorship, and fan loyalty, or changing in the winning and game attendance rates. Therefore, sport corruption is divided into two categories. The first category is related to the competition results, where the athletes, sporting officials and non-athletes such as referees or officials are the providers and the receiver of the bribes. The second category is corruption associated with the host venue where the sporting bodies and officials are in control over the competitions, allocation of rights, and nomination for positions (Maennig, 2005). On the other hand, Gorse and Chadwick (2010) had divided the corruption into four categories where are bribe, match-fixing, misuse of inside information for betting purpose, and doping. This shows that sports have transformed from being a fun game that is enjoyed by millions to a big business where the decisions are made to generate revenue. The increasing amount of money makes sport vulnerable and easy target for corruption. The unethical behaviour breaks the honesty and the trust that the game carries in addition to questioning the fairness.

This leads to the importance of understanding the typology of sports corruption. Andreff (2016) had explained the sport typology as follows: First, corruption can be done without significant amounts of money in return for an exchange. Second, corruption may affect the highest sport governing bodies. Third, due to the high amount of money going into sports, there are new ways of corruption being formed through the first sport betting scandals. Fourth, the globalization of the economy and sport had made it easy for global criminal networks to enter the sports gambling business where undergoing match-fixing on a wide scale related to global on-line fraudulent sports bets became simpler. Fifth,

having many international betting scandals related to match-fixing leads to global taxation to be imposed on sports bets. Therefore, corruption had become a worldwide phenomenon and takes place in many different forms where it can be bribery, gambling, match-fixing, doping, money-laundering, and much more in the whole sports system whether it was during events or between the athletes and the management team.

This shows how each corruption case is unique and different however, they all have the same result. For instance, Gorse and Chadwick (2010) made an analysis of 2,089 cases of corruption in sport from 2000 to 2010, and results were that 95.64% were cases that are connected to doping and the use of banned drugs where athletes used to improve their performance level. A study made by Ramos (2009) on corruption in tennis had shown that the reasons for corruption in tennis were insufficient endorsements, lack of investigation, and consistency among the governing bodies' rules. This shows that corruption has been happening in all types of sports events and competitions regardless of the country, sport, size, and the importance leading to a lot of legal actions and consequences.

2.2.3 Doping in Sport

The World Anti-Doping Agency (WADA) is a foundation introduced by the International Olympic Committee (IOC) that aims to fight and monitor doping in sports and bring consistency to anti-doping rules and laws within the sports organizations and governments all over the world, defines doping as 'the occurrence of one or more of the anti-doping rule violations' (WADA, 2009). The violations can be summarised as:

- Being unavailable for out-of-competition testing.

- Interfering with doping control.

- Not willing, failing, or avoiding to be tested for doping.

- Owning or having prohibited substances.

- The existence of a banned substance, its metabolites or markers in an athlete.

- The use or attempted use by an athlete of a prohibited substance.

- Trafficking prohibited substances.

The use of doping by athletes creates unfairness, unjustified disadvantages, bad reputation, and distrust between the athletes, public, and organizations. According to Baron, Reardon, and Baron (2013), doping is not only due to the high amount of money that is given to the athletes and is older than organized sports. In the third century BC during the Ancient Greek Olympic, athletes used different brandy and wine mixtures, ate hallucinogenic mushrooms and sesame seeds to enhance their performance, and used different plants to improve speed and endurance or to mask pain to allow injured athletes to continue competing (Reardon & Creado, 2014). In 1966, the first drug test took place during the European Championships, and after that in two years, the IOC started to do drug tests at the Summer and Winter Olympics (International Olympic Committee Factsheet, 2013). In 1986, according to the World Anti-Doping Agency (2010), IOC banned any substances that helped in the increase of the level of oxygen being carried in the haemoglobin in addition to erythropoietin drug. Countries like France had started to implement anti-doping law, as there have been many governments working with the international sports authorities (Reardon & Creado, 2014). However, debates and arguments were taking place between the IOC, sports federations, and the governments on how can doping be defined, policies, and approvals. Therefore, there was a need for an international agency that would have set of standards when it comes to anti-doping. As a result, WADA was established (Reardon & Creado, 2014).

2.2.4 Why do Athletes Dope?

There are several reasons why athletes dope. According to Emran et al. (2014), willingness to do anything to achieve success, believing that other athletes and competitors are using drugs, and the expectations and influence from the community and the media regarding success and performance of the athlete can put so much pressure on the player to reach the highest outcome which results to doping. In addition, the direct or indirect pressure from coaches, parents, peers, government and authorities, huge financial gains and rewards, and not having access to legal and natural methods to improve ones' performance can play a role on the player's attitude (Emran et al., 2014).

2.2.5 Other types of Corruption

There are many different corruption types that affect players, teams, representatives, and more entities.

Table 1: Types of Corruption (Source: Brooks, Aleem, & Button, 2013)

Types of Corruption	Explanation
Collusion	When two teams play for a draw in a qualifying round of a competition so both teams, can move to the next level of competition or have a financial advantage due to advancing in a tournament or eliminating the strong team.
Conflict of interest	When sports representative acquiring a service from a business that the person has a financial gain in and not what is the best and suitable services for the club.
Extortion	To kidnap the player from teams or family members to have a better outcome in the match.
Cronyism/Nepotism	When a manager of the team guarantees a person/player a position based on personal connection although he/she is ineligible and does not fit.
Fraud	Players or officials deciding the outcome of the match.
Gifts and hospitality	Giving presents and gifts to sporting entities' representatives in order to influence them to vote for a specific firm/country in return.
Lobbying	A person giving a reward to have access to a high-level club to organize an international tour or an entity making particular demands.
Money-laundering	To purchase and trade players at high prices between two clubs and then take some of the money and depositing them in a different bank account.

2.2.6 Shift between sport and eSports corruption phenomenon

Similarly to the traditional sports, eSports is not limited to emotions, popularity and business growth as both suffer from unfair practices (Koryzma &Zdanowicz, 2019) and the high level of entertainment can easily generate a high value of income to the athletes/players in addition to high publicity, sponsorships deals, spectatorships, and being wanted by other teams (Kummer, 2019). Despite the fact that doping in traditional sports is not a new phenomenon, the use of artificial means in order to improve ones' performance is a critical issue even if the opinions are divided between doping being a serious matter that must be stopped and doping is unwanted yet can't be avoided due to sport being institutionalized (Petróczi, 2007). For eSports, being the new phenomenon and pushed as the next big thing in entertainment, a new aspect that resembles the traditional doping was created with the name of eDoping, which only exists in cyberspace (Koryzma &Zdanowicz, 2019).

2.3   eSports: a 'New Phenomenon'

2.3.1 What is eSports?

Electronic sport (eSports) also known as virtual sport, competitive computer gaming, or cybersport is "a form of sports where the primary aspects of the sport are facilitated by electronic systems; the input of players and teams, as well as the output of the eSports system, are mediated by human-computer interfaces" (Hamari & Sjöblom, 2017). The competitions are usually online through a 'multiplayer' environment or offline, through a "Local Area Network". Depending on the game, the competition can be one player versus another player or a team that is made up of eight players who use a computer or a console (for PS4, Xbox, etc.) to compete for the title against another team. The organization of competitions is made through leagues, ladders, tournaments, and players

usually belong to teams or other sporting organizations that are sponsored by various organizations (Hamari & Sjöblom, 2017). With that, eSports had become one of the most popular recreational and entertaining activity that is among children, youths, and adults which resulted in growth when it comes to popularity, importance, and attractiveness in addition to challenging many popular sporting codes and events.

2.3.2 Background of eSports

The origin and roots of electronic sports can be traced back to 1972 when the first competition between 24 players took place at Stanford University for the game "Spacewar" with a grand prize of a one-year subscription for Rolling Stone (Consolazio, 2019). After that, in 1980, Atari has held a Space Invaders Championship which was the largest scale of video game competition, attracting more than 10,000 participants across the United States, establishing competitive gaming as a mainstream hobby (Larch, 2019). In 1989, with the launch of the worldwide web in addition to the development in the programs, software and hardware technologies that enabled network and multiplayer functions, PC games such as Counter-Strike became famous which had caused an increase in popularity and more exposure for eSports competitions (Jonasson & Thiborg, 2010). With that, large eSports tournaments started to take place for PC games such as Cyber-athlete Professional League and Nintendo World Championships which had132 players competing (Consolazio, 2019). During the 2000s, multiplayer gaming on consoles and Internet Cafes had reached new levels in addition to South Korea's broadband internet networks and a high level of unemployment made eSports thrive (Larch, 2019). According to Consolazio (2019), Internet cafes had started to be all over the world, which gave the opportunity for video game players to compete and play with one another on high-powered PCs that they may not have been able to purchase. In addition, the British

eSports Association (2019) had stated that the introduction of online services such as Xbox Live in addition to the rise of broadband internet had given the opportunity to allow console players to play games such as Halo 2 with or against other players and stay more connected with each other remotely over the internet. During that period, covering eSports competitions on television became popular in South Korea but failed elsewhere. However, in 2011, with the help of Twitch, an online streaming platform that is the most common method used for watching tournaments, eSports was able to grow (Westphall, 2018). The lack of understanding about what eSports is in addition to the increase in the number of viewership, players, competitions and tournaments, ethical and legal problems started to rise. Just like any traditional sport, people started placing real money wagers on different outcomes, players, and winners of the tournaments (Esports Betting, 2019). As a result, there was an increase in the global eSports betting market and gambling which is also often related to matchmaking.

2.3.3 Popular Genres

There are countless of eSports games and genres that players play all over the world. However, the five most popular game genres dominating the global gaming market are:

Table 2: Game Genres (Source: Nick, 2018)

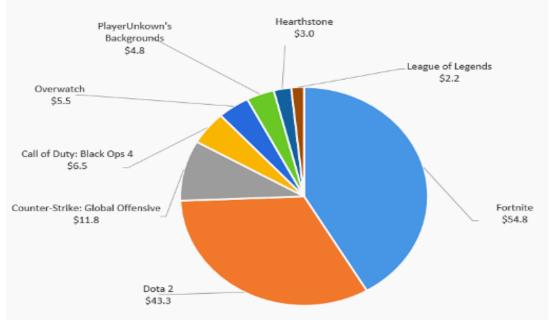| Game Genres	Explanation & Example
Action games	Action games aim to challenge how fast the player is when it comes to his/her reflex action, reaction time, and hand-eye coordination. Action games have been divided into many sub-genres, which are fighting games, shooter games, and platform games such as Double Dragon and Super Mario 3D Land.
Sport games	Sport games give the player the feeling of the traditional sport. Usually, the enemy team is controlled either by artificial intelligence (AI) or by real-life people such as the FIFA series.
Battle Royale games	Battle royal games is an online multiplayer video game genre that is based on last-man-standing gameplay and requires surviving, exploration, and searching elements from the players such as Fortnite Battle Royale and PlayerUnknown's Battlegrounds (PUBG).

Role-playing games (RPG)	Role-playing game gives the player the ability to control a fictional character to go on missions in an imaginary world. RPGs genre has branched out to online, adventure, strategy, and action RPGs such as Battletech, Star Wars, and Dungeons & Dragons.
Real-time strategy games	Real-time strategy games require strong teamwork, players to position properly and move units around while having control over structures in order to be able to secure parts of the map or destroy the opponents' base such as League of Legends.

2.3.4 Popular Games and Prize Pool

The following pie chart shows the most popular eSports games in 2019 (Dewley (2019) and the games' total prize pool (in million) where the amount combined from all tournaments throughout 2019 (Medovarski, 2019). The highest prize pool of $54.8 million is for the most famous game Fortnite, which was launched in 2017 and has more than 125 million active players (Conway, 2018). The success of Fortnite was due to being free to play, available on all major platforms and consoles, psychological and social investment, and after being eliminated, the player can still watch others play (Conway, 2018). The second highest prize pool is for Dota 2 with $43.3 million which was developed in 2013 while the rest of the games range between $11.8 million to $2 million.

Figure 1: Popular Games and Prize Pool

2.3.5 eSports Market in 2019

When it comes to the players participating in eSports, it has shown that women purchase and take part in the video games almost as much as men do. According to Hilbret (2019), both genders are between the ages of 18-29. Females make 48% of the market however, only 6% of female video game players identify as 'gamers'. On the other hand, men dominate 50% of the market where 33% of males video game players identify as 'gamers'. When it comes to professional players, 5% are females while 95% are males (Hilbret, 2019). In addition, Pannekeet (2019) had stated that the global market for eSports had grown by 26.7% and generated a revenue of one billion dollars for the first time ever. About 82% of the market revenue comes from endemic and non-endemic brand investments such as media rights and sponsorship where sponsorship itself generated almost $456.7 million. Moreover, the global audience level had increased by 15% reaching 453.8 million audiences where almost 201.2 million are eSports enthusiasts and 252.6 million are occasional viewers. China continues to be one of the reasons for such growth as the country contributes the most in the market having 500.2 million people aware of eSports in addition to global mainstream entertainment platforms and media such as Netflix, Redit, Twitch, and much more (Pannekeet, 2019).

2.3.6 Main form of Corruption: Doping in eSports

- **The use of Substances**

The first and most common type of corruption is doping. The use of drugs in order to enhance the performance, memory, learning, attention, mental ability, and to boost the brain capability has been well-documented and widespread among the players. The use of marijuana and psychostimulant drugs especially "Adderall", a prescription medication drug, which helps in treating sleep disorder and attention deficit hyperactivity disorder

(ADHD) (Weyandt et al., 2018), is widely used during competitions and tournaments among players. Added to that, there are other types of drugs that are also favourite among players, which are: Modafinil, Donepezil, and Propranolol (Ruef, 2019). The doping initiative is usually based on the player's own decision or on the command of the coach. Common situations are found in players who compete in first-person shooter video games such as Counter-Strike: Global Offensive (CS:GO) and Overwatch. With the drug, the player can have a quicker reaction time and become less exhausted. According to Rodenberg and Holden (2016), ADHD drugs help the player benefit from feeling a sense of euphoria, having improved concentration, decrease pain, and increase aggression. However, due to eSports being new and not having independent regulations, eSports organizers have listed some banned substances, in accordance with the rules set out by World Anti-Doping Agency (WADA). Therefore, before the competitions, players (sometimes coaches too) are required to undergo some blood tests in order to control the fairness of the game. Ruef (2019) had stated that there were plans for skin tests for drugs and substances but changed to testing by collecting saliva samples randomly during the competition to be more convenient. Yet, it is very difficult to know which player is doping, as there is no physical presence to the drug on the players. Even though pro players are obliged to represent themselves (and the team) properly and in an ethical manner by following the rules that are set during the tournaments and associations as well as having good sportsmanship, doping had occurred in eSports.

- **eDoping**

The rise of a new phenomenon called eDoping has been taking place. This includes players altering the hardware devices, especially the mouse, or installing a software into the computer to gain an edge over the competition. For the mouse, according to Turton

(2017), players usually add their own custom code and implement an ARM microprocessor in order to store their gaming data and to reobtain those data on multiple computers later on. Such modification in the mouse gives the player the chance to impose slightly more damage, speed, and accuracy (Turton, 2017). When it comes to using cheating software and programs, the use of bots, hacks, and software assistance such as aim-bots and trigger-bots are common to gain an advantage (Papaloukas, 2018). Aim-bots and trigger-bots provide varying levels of automated target acquisition to the player and will automatically shoot when the opponent appears within the field-of-view of the player (whether the player actually saw the opponent or not), therefore the player would not need to put much effort or have the need to aim (Computer Hope, 2017). The targeting will work and shoot even if the opponent is far away to be seen directly. The implementation of such cheating techniques helps in giving the player more power and better skills over the opponent, adjust the extrasensory perception, see through walls and smoke, assisting with very difficult shots, and never have to reload.

2.3.7 Other forms of corruption in eSports

- **Skins**

The most common type of gambling in eSports is through the wagering of "skins". Skins are virtual cosmetic elements that change the player character's appearance, outfit, weapon shape, or colour in the game. Skins show up naturally in games through item drops, winning a battle, or buying them with real money. The problem is that the chances of getting rarer items are non-existent which had resulted in skins becoming items that can be traded and bought between players or directly purchased with real money for a certain price which are usually low. Yet, according to Johnson and Brock (2019), the most expensive skin ever sold was for almost $50,000. Moreover, skin gambling is made using

third-party grey-market websites where a person gambles on a skin using virtual games such as blackjack and on the outcomes of these games, the skins can be won, lost, or traded. In some cases, instead of the players receiving cash bribes, the competitors receive in-game items such as skins that have a high value and can be exchanged for money. For Johnson and Brock (2019), skins can be referred to chips just like in many casino games and players utilize skins to place bets that can be cashed out at the end. For Grove (2016), skins are described as stakes in 'lotteries' where the higher a player's stake, the higher the chance of winning the total pot, essentially a form of 'jackpot'-style lottery. With that, the relationship of the integrity of eSports, which includes bribery or fraud, and integrity of betting, which is related to the outside influence, can cause serious problems to many of the stakeholders that are involved.

- **Loot boxes**

Loot boxes are a random reward mechanism inside the game that can be functioned as micro-transactions. In many current games, loot boxes are provided for free, either purchased by using in-game currency or real money for a small amount or rewarded to the player after achieving a certain level or finishing a mission (Macey & Hamari, 2018). In many games, the ability to sell loot boxes and virtual items is not allowed inside the game for the players. However, it is possible through the use of external marketplaces. Zendle, McCall, Barnett, and Cairns (2018) had mentioned that if the virtual items obtained are not locked to the player's account, players can easily trade those items between each other for real money. Players can then make a high amount of profit by selling those items for hundreds of dollars.

Inside the loot boxes are virtually collectable items such as in-game coins, characters, weapons, and armor that can change how the character looks like or the gameplay. Yet,

what is inside the loot box is random and cannot be determined in addition to the value of the items, which may or may not exceed the price paid just like the lottery scratch cards (Baglin, 2017). On the other hand, Johnson and Brock (2019) had compared the loot boxes to gambling slot machines, as skills aren't required from the player in order to open the loot box or to receive the prize. For Zendle, McCall, Barnett, and Cairns (2018), buying loot boxes are similar to playing blackjack in a casino where an individual puts real-world money hoping to receive a valuable reward. In 2017, due to implementing loot boxes in Battlefront 2, an action shooter video game, there was a huge backlash from the community to categorize loot boxes as a gambling mechanism (Macey, 2017). In France, due to the government regulation against loot boxes, CS:GO had implemented a new item called "X-ray Scanner" where only French players were allowed to use it. This item made the players have the ability to have a look at what is inside the loot box before actually opening it (Hall, 2019).

- **Match-Fixing**

Match-fixing is certainly more complex and challenging compared to other types of cheating. García and Murillo(2018) had defined match-fixing as the situation when one team makes side payments to the opposite team to make less effort or to the referee to make biased decisions, or situations when players or officials can gain monetary benefit from gambling on the outcome of a competition. However, match-fixing is hard to notice, as there is no exact evidence when the team is throwing the game, has faced a hard game, or miscommunicated a strategy. Situations that have match-fixing related to gambling have the fixers usually make bets at an attractive market price because the odds reflect the bookmaker's belief that the price is informed by the bookmakers' expert knowledge.

- **Betting and Gambling**

Betting and gambling have been the centre of sports and eSports for so long and takes many shapes and forms. The amount of money generated tempts millions of people in wanting to bet in order to win. For Abarbanel and Johnson (2019), professional gambling can be seen in mainly three forms: match-fixing, cheating to win, and cheating to lose. Match-fixing is when the player intentionally throws a match in order to gain profit off a wager, which can be the competitor's wager or that of the person who bribed the player to throw the match. Cheating to win includes the use of software to hack, doping, online attacks, and abusing the opponents while cheating to lose is official's corruption, spot-fixing, and tournament "structural" manipulation. Abarbanel & Johnson (2019) had mentioned that knowing the opinions of match-fixing corruption in the competition by the eSports consumers helps in establishing the basis in which it helps in knowing how the corruption influences the spectator and the betting behaviours. Furthermore, betting on the outcome of the match, the performance of the player, or the points earned during the competition, has become very common and is similar to skin betting.

2.3.8 Scandals and Integrity issues

The intention behind eSports gameplay plays an important role in the creation of actual eSports gameplay behaviour, which makes it easier to understand the level of integrity. Jang and Byon (2019) had used UTAUT2 framework to explain a person's intention as eSports involve user-interface-facilitated interactions between users and the visual feedback they receive via video display devices such as to monitor screens. Since there is always new technology in the hardware and software used by eSports consumers, UTAUT2 can help in explaining the intention in addition to why consumers use and dispose of new technologies. The concepts of UTAUT2 are effort expectancy, social

influence, hedonic motivation, price value, habit, and flow. Effort expectancy is defined as the ease in which eSports games can be learned and played (Jang and Byon, 2019) while social influence is the degree in which an individual sees how important others believe he or she should use the new system (Venkatesh et al., 2003 p. 451). Moreover, Jang and Byon (2019) define price value as a consumer's exchange of monetary cost for eSports gameplay in return for perceived benefits and Venkatesh et al. (2012) defines a habit as the extent to which people tend to perform behaviours automatically because of learning (p. 165). For the last concept, Jang and Byon (2019) describe flow as a state wherein consumers are fully absorbed in their eSports gameplays and feel that they are inside a given game's virtual world. However, with real-money transactions, it creates a parallel external market that affects the integrity of the game that can be unethical or even illegal (Papaloukas, 2018). For Gilbert and Skinner (2015), integrity in sport is displayed through different quality of leadership practices that present the spirit and purity of the sport, a clear structure of governance that creates a strong trust with the public, and a belief system that creates ethical decision-making processes that sustain sport from community to elite levels in creating a better society. Similar to that, the National Integrity of Sport Unit (2016) defines sports integrity as the justice and truthful performances and results that are not affected by any illegal enhancements or external interests in addition to the moral behaviour of the athletes, administrators, officials, supporters and other stakeholders, which enhances the reputation of the sport in its all aspects. When it comes to eSports, Valentine (2019) had defined integrity as cheating, hacking, or being involved in any disgraceful, deceiving, or untruthful behaviour that changes the experience of others gives an advantage to the teams and players unfairly and harms the legitimacy of eSports.

Table 3: Corruption Cases

Company	Type of Corruption	Scandal	Source
Electronic Arts' (EA)	Gambling through micro-transactions	Players realized that some of the weapons, characters, and specific buffs that enhanced in-game performance could be obtained through loot boxes that are only purchased with in-game currency.	Johnson and Brock (2019)
StarCraft II player named Lee Seung-Hyun	Match-fixing	A journalist had paid Lee money to lose the matches on purpose and then bet on those fixed matches.	Fox Sports Asia (2018)
Team named Thunder Predator	Cheating through 3rd party program	The mouse gave an advantage for the player to perform movements that would not be possible without macros.	Gault (2018)

2.4   Theoretical underpinnings of this study

This study is theoretically informed and underpinned by the "Rational Approach". The rational approach theory can be defined as the players depending on rational and balanced calculations to make their choices that will lead to an outcome that is best aligned with what they want and their own interests. With this, the player's doping decisions can be understood more. Dimant and Deutscher (2014) states that the need and expectations of winning a game in addition to the high amount of prize money that will be gained cause the player to use a form of doping. The rational approach makes it clear that the player fully knows that doping is wrong and yet decides on doing it. The players compare the risks and the cost of losing and being caught, to the benefit gained from winning. Therefore, the players participate in a crime in a rational-risk assessment type of way (Dimant & Deutscher, 2014).

Chapter 3
Methodology

3.1 Introduction and purpose

This chapter will present and describe the research process and the reasoning behind the techniques used in the processes. It provides information concerning the various stages of the research starting with the research design that was used in undertaking this research. The chapter also describes the data collection techniques, the interviews that were made in addition to the selection of the participants, and the data analysis process. The chapter ends with the ethical considerations that were taken during the data collection and a chapter summary.

3.2 Research design

This study is an interpretive in nature and qualitative-oriented, which focuses on the motivations and the reasons behind high-rank eSports players' perception when it comes to different methods of doping. This was accomplished by setting an online interview with the players in order to ask open-ended questions regarding their knowledge of eDoping techniques, views on ADHD drugs, reasons behind why a player dopes, and whether there is any education or laws in that matter that they are aware of.

3.2.1 Qualitative-based design

Using the qualitative method helps in capturing the meanings or qualities that are not measurable, such as feelings, opinions, and experiences which is related to interpretative approaches (Gratton & Jones, 2014). As a result, the research will not measure anything but rather describe the phenomenal and characteristics of corruption in eSports

specifically doping. Moreover, qualitative research uses non-numerical primary data, which is collected over a period of time in addition to analyzing, describing and understanding different concepts that are very hard to be changed or put into numbers, and therefore, the use of words will be more relevant (Gratton & Jones, 2014). The advantages of qualitative research according to Gaille (2018) are that it helps in understanding the changes in patterns, a content generator where ideas can be collected from specific socioeconomic demographics, creates valuable content, saves money as this method uses a smaller sample size, and has no right or wrong answer, which makes collecting the data easier. However, Gaille (2018) stated the disadvantages, which are qualitative research does not represent the data in a statistical manner but rather in perspective form only, relies on the researcher's experience, may require multiple sessions to gather all of the data that is needed to make a decision, and data collected can be influenced by researcher bias. According to Bhat (2018), one characteristic for qualitative research is that it usually collects data at the sight, where the participants are experiencing issues or problems therefore, it does not require the participants to change their locations. Qualitative research helps in solving complex issues by breaking down into meaningful inferences that are easily readable and understood by all. Since it is a more communicative method, people can build their trust in the researcher and the information thus obtained is raw and unadulterated.

With the use of primary data, the information will be collected specifically for this research and the questions that are asked are tailored if needed in order for the participants to understand it more (Wolf, 2016). Moreover, this research will be explanatory research where there is little or no prior knowledge of a phenomenon and in this case, doping in eSports therefore, there is a need to explore more by looking into clues or ideas that are

emerging from the concept and data collected in addition to trying to gain familiarity (Gratton & Jones, 2014). The aim for the explanatory method is to increase understanding on a certain topic without providing results but to only determine how and why things happen, having flexibility in sources, and provides better conclusions (Yousaf, 2017). Furthermore, the interpretive method will be used were searching for the truth or deducing explanations from measurements are avoided but rather seeks understanding behind it, gain an insider's perspective, and understand the subjects from within (Gratton & Jones, 2014). These methods used help in knowing the characteristics of the sample that is being studied, identified, evaluated, and reported in order to provide a careful, thorough, and systematic examination in order to identify themes, biases, and meanings (Berg & Lune, 2011). Those methods also provide information as well as give an idea about eSports players' believes, thoughts, and habits when it came to different types of doping.

3.3 Data collection techniques

3.3.1 Interviews

An interview is a way to collect data and information through a conversation where a researcher coordinates the process of the conversation and asks open-ended questions to an interviewee, which can be done through face-to-face, over the telephone, or via the internet (Easwaramoorthy & Zarinpoush, 2006). In most cases, the researcher (who is the interviewer) is the one who is an expert on the topic and intends to understand the opinions of the respondents in a planned series of questions and answers (Bhat, 2018). For this research, the in-depth interview method was used. According to Boyce and Neale (2006), in-depth interviews are "a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation". When conducting the interview,

according to Sociology Group (2019), the questions that are asked should be worded the same for all the participants and clarification of the question should be prevented in order to prevent any misunderstanding of the question in addition to questions being asked in the same order as in the questionnaire. It is very important to be neutral before starting the interview in order to prevent leading the respondent and to minimize the possibility of being bias (Sociology Group, 2019). The advantages of using interviews according to Rashid and Bappi (2013) are that there is a possibility to correct any mistakes on spot, develops a relationship between the researcher and the participants, helps in asking many open ended-questions, saves time, costs less, and have the possibility to explore causes behind any problems. On the other hand, the disadvantages of interviews according to Edson (2015) are that there is a possibility that the researcher becomes bias during the interviews, which influences the process, difficulty in data analysis as data collected is not pre-coded and have an open format, less reliable and consistency, and recording the interview may intimidate the participation.

20 online interviews were conducted by asking the same six open-ended questions, in the same order, in a two-way dialogue were the research participants can open up and state their opinions, thoughts, experiences, and feelings which is useful especially that the topic that is being examined needs questioning and searching (Easwaramoorthy & Zarinpoush, 2006). Before the actual interview questions, some basic general questions such as age, gender, region, and rank level were asked in order to understand the player more. After that, questions on the player's opinion on whether they know the different types of doping, the laws, and regulations, have an anti-doping education, and any future recommendations were asked.

3.3.2 The study's population

The target population for eSports is mainly "young digital natives" who are mainly male players or fans that age between 20 and 35 who have certain gaming habits, demands, tastes, and preferences (Tran, 2018).

3.3.3 The study's sample

A sample of 20 players participated in which were contacted from different discord groups of different games (Mobile Legends, Overwatch, CS:GO, League of Legends, and more). Before beginning the interview, the player had to be screened to ensure that the person is 17 years old or above with a high elo rank in the game that he/she plays or had competed in several competitions on a professional or semi-professional level whether it was locally, nationally or internationally. Elo is defined as a method of calculating the skill level of the player in a competitive environment (Newell, 2018). For most games, the high elo ranks are named as a challenger, divine, grandmaster, master, mythic glory, global elite, and diamond. Moreover, players of both genders from anywhere in the world were welcomed to take part in this research.

3.3.4 Gaining access

Gaining access requires the ability to convince the participants to take part in this study by explaining to each person the aim of the research and to develop a relationship with each one in order to be able to build trust so the collection of information becomes easier. Therefore, gaining access is not a simple task where it requires elements of strategic planning, hard work, and luck (Van Maanen & Kolb, 1985). According to Buchanan et al (1988), there are four-stages to gain access: getting in, getting on, getting out and getting back and explained each stage as follows: At the getting in stage, there should be a clear idea about the research's objective, time, and resources that will be used. The objective

of the study was set before starting the research process, the time to collect data was set for a one-month span and the resource used was Discord, a communication platform made specifically for gaming communities to connect (Hornshaw, 2018). After knowing who will be the participants, the getting on stage starts where a suitable time for the interview was set for each participant in order for questions to be asked and the information to be collected. Therefore, the need for good communication skills is important. For the getting out stage, there must be a deadline set where all the interviews are made and to make sure that all questions have been answered. Finally, getting backstage is to return back for further fieldwork.

3.4   Data Analysis

3.4.1 Template analysis

Template Analysis is a form of thematic analysis, which emphasizes the use of hierarchical coding but balances a relatively high degree of structure in the process of analyzing textual data with the flexibility to adapt it to the needs of a particular study (Brooks, McCluskey, Turley & King, 2015). The data involved are usually interview transcripts but may be any kind of textual data, including focus groups diary entries, and open-ended question responses on a written questionnaire. Moreover, the template analysis is flexible when it comes to the style and the format of how a template should be, compared to other thematic approaches. According to Urale, Bellringer, Landon, and Abbott (2015), template analysis is an approach that focuses less on how things were said and more on the patterns of responses, in addition to the meaning of each participant's words as the participants' words are assumed to be an accurate representation of their own experiences. A template analysis does not suggest in advance a set sequence of coding levels rather; it encourages developing themes where the richest data are in

addition to not insisting on an explicit distinction between descriptive and interpretive themes, nor on a particular position for each type of theme in the coding structure (Brooks, McCluskey, Turley & King, 2015). The analysis for this qualitative research includes both explanatory and interpretive analysis. Since the aim of the research is to analyze eSports players' perception when it comes to doping in order to know the threats that will be on the integrity of eSports, template analysis can help in discovering the causes of human action and phenomena. Moreover, it can be used within a contextual constructivist position and assume that there are many interpretations to be made of any phenomenon which depends on the position of the researcher and the social context of the research (Brooks, McCluskey, Turley & King, 2015). According to Surendran (2019), qualitative data analysis is done through the following five steps:

1. Data should be arranged after the collection process, as the information will be unstructured and unorganized. It is very important that the information to be written down in words after each interview and to be arranged systematically.

2. After collecting a large amount of information, the need to be arranged in an orderly manner is required as it will eliminate the time being wasted. One way that helps is to go back to the research objective and organizing the data based on the questions asked.

3. Setting up codes, categorizing, and assigning patterns for the collected data are the best ways to compress a huge amount of information collected. Coding will also help in deriving theories from the research findings, which makes it easy to build on the patterns to gain in-depth insight into the data that will help make informed decisions.

4. Validating data is important in order to prevent any flawed data.

5. Conclude the analysis process and present the data in a report that can be easily read.

In a more understanding of the template analysis technique, King (2012) states that first, it is important to become familiar with the accounts to be analyzed. In a small study, it is important to read the data set while in a large study, a subset such as transcripts or diary entries of accounts can be read. Therefore, start with some identified priori themes as likely to be helpful and relevant to the analysis. If not useful for the analysis, these themes can be redefined or removed. After that, organize the themes that were emerged into meaningful clusters then define how they relate to each other within and between these groupings. This will include hierarchical relationships that have narrower themes within broader ones and lateral relationships across clusters. An initial coding template is defined which develops an initial version of the coding template based on of a subset of the data rather than carrying out preliminary coding and clustering on all accounts before defining the thematic structure. Later on, apply the initial template to further data and modify it as necessary. Then examine the data and the material of potential relevance to the study is identified and whether any of the themes defined on the initial template can be used to represent it. If the existing themes do not fit the new data, changes can be made to the template. New themes can be added and existing themes can be changed or removed if not needed. Finally, finalize the template and apply it to the full data set. However, further data can suggest more refinements to coding. The development of a template cannot be completed if there are some remaining substantial sections of data relevant to the research question(s) that cannot be coded to it.

The approach of the research followed three main phases, which are:

1. Exploration: Going through previously written researches on corruption and doping in eSports to understand previous themes, the problems/importance, and collect as much information and knowledge on this critical matter as possible. This helped in writing the interview questions and determining who will be targeted for the data collection procedure.

2. Data collection: The final interview questions were discussed and evaluated with an eSports professional player to see how relatable those questions are to other players. To get the responses, the video gaming platform "Discord" was used to reach the interviewees. After that, the player's perception will be evaluated.

3. Data analysis: Data analysis and the collection of the results involved three parts where first is the research question, second is player's general information, and third is the player's opinion on different doping matters.

In addition, qualitative analysis methodology was used by first finding common themes and similar patterns in responses, then collectively constructing and grouping results, and then explaining the meaning of each answer.

Figure 2: Summary of Methodology Phases

RQ: Is doping a potential threat to the integrity of eSports?	1. Exploration Discovery of research topics in eSports. **1.1 Explore** previously written researches for corruption in eSports **1.2 Understand** previous themes, find problems and general necessities **1.3 Collect** information and knowledge **1.4 Discover** eSports themes
	2. Data Collection In depth interviews **2.1 Elaborate** final version of the interview questions **2.2 Share** and interview the participants **2.3 Evaluation** of the participant's knowledge
	3. Data Analysis Analysis of the data based on the research question **3.1 Analysis** to make the interview questions fit the research question **3.2 Final analysis** of the participant's general information and knowledge gained **3.3 Collectively** constructing and grouping results **3.4 Discussion** and conclusion

3.5 Ethical Considerations

Ethical considerations are one of the most important aspects of research. According to Bryman and Bell (2007), the following ten points are the most important ethical considerations:

1. Participants should not be subjected to harm in any way.

2. Respect for the dignity of the participants should be prioritized.

3. Full consent should be obtained from the participants before the study.

4. The protection of the privacy of the participants has to be ensured.

5. An adequate level of confidentiality of the research data should be ensured.

6. The anonymity of individuals participating in the research has to be ensured.

7. Any deception about the aims and objectives of the research must be avoided.

8. Affiliations in any form, sources of funding, as well as any possible conflicts of interest have to be declared.

9. Any type of communication concerning the research should be done with honesty and transparency.

10. Any type of misleading information, as well as the representation of primary data findings in a biased way, must be avoided.

As this study required participants from different parts of the world in addition to the player's opinions and thoughts in different aspects, ethical consideration was very important to be discussed and signed before starting the interviews even though the questions did not require any personal information. However, to avoid any ethical issues, first, a copy of the interview questions were submitted and reviewed by the Norwegian Centre for Research Data (NSD) for approval to do the interviews. Moreover, a consent

form was given to all the participants to read and sign if agreed on before asking the questions.

3.6   Chapter Summary

For this chapter, it was very important to explain which methods were used to have a better understanding of how the research is going. The use of qualitative design methods in addition to explanatory and interpretive approaches helps in explaining the research in an in-depth way to understand the feelings, opinions, and experiences of the players towards doping in the new phenomenon –eSports. With this, it identified and provided a thorough idea about who are the targeted population and sample. As a result, 20 players with a high elo rank participated and signed a consent form before having the interviews.

Chapter 4
Result and Discussion

4.1   Introduction and purpose

This chapter will be divided into two sections, results and discussion where first, the interview results will be presented in a logical sequence and then the main findings will be interpreted and discussed. The purpose of this section is to show how the results obtained are with significance to the research question. First, the interviewees' general information in addition to the peak rank is stated. Then, the interviewees' responses were openly coded and a template analysis was formed. After that, common themes emerged on questions regarding player's perception, reasons, and future recommendations towards doping were mentioned followed by the discussion. In the end, the research limitations were presented.

4.2   Results

To start the interview, the NSD's approval was first granted. During this research, no real names or usernames of the interviewees were mentioned. Instead, "P1" (participant 1) is used when quoting the answers. After that, the interview started by asking the research participants to sign a consent form that states that they agree to be part of the research and that it is applicable for the player to stop at any given moment. Then, all of the research participants were asked the same 11 questions in the same order starting with general questions to know the age, gender, region, and peak rank. After that, questions related to corruption in eSports and the player's opinion on different aspects of doping were asked.

4.2.1 Basic Player Information

1. Gender: All of the research participants were male.

2. Age: 10% of the research participants were the age of 17 and 27, 15% were the age of 19, 20% were the age of 21 and 22, 15% were the age of 23, and 5% age of 24 and 28.

3. Region: The research participants were from different parts of the world as diversity in the way of thinking is valued. Results showed that 40% of the players were from North America, 35% were from Africa, 15% from Europe, and 10% from Asia.

4. Peak Rank: 11 of the research participants played Overwatch and ranked Grand Master, 4 of the research participants played Mobile Legends and ranked Mythical Glory, 3 of the research participants played CS:GO and ranked Global Elite, and 2 of the research participants played Apex Legends and ranked Apex Predator.

Table 4: Basic Participant Information

Game	Rank	Number of Players
Overwatch	Grand Master	11
Mobile Legends	Mythical Glory	4
CS:GO	Global Elite	3
Apex Legends	Apex Predator	2

4.2.2 Template Analysis

To create a template analysis for this research, Gratton and Jones (2004) four-part framework is followed. First, the raw data that was collected during the interviews were read thoroughly and then analyzed. Second, it is important to carry out preliminary coding for the data obtained by highlighting the textual data that is relevant and contributes to

the understanding of the research question. Therefore, the research participant's responses were first openly coded.

a. For the first three questions, "*Can you tell me what you know about: (a) aimbot in games and (b) hacks and cheats in games*" and "*What is your view about "ADHD drugs*" that players use to enhance their performance", the open code tags are "unethical act," "to get an advantage over others," "cheating mechanism", "to aim better", and "popular issue".

b. For the fourth question, "*Would you consider ADHD medications and energy drinks as doping in eSports",* the open code tags are "ADHD medications is doping" and " energy drinks not so much".

c. For the fifth question, *"In your opinion, what are the reasons behind a player doping",* the open code tags are "don't want to lose", "maintain concentration", "constant pressure", "enhance performance", and "cut-throat competition".

d. For the sixth question, "*Do you think players who set themselves excessively high and unattainable goals might be more at risk for doping",* the open code tags are "setting high and unattainable goals leads to a higher risk for doping", "will do anything", "depends on the mindset" and "demanding career".

e. For the seventh and eighth questions, *"What is your view about the rules and laws when it comes to doping in eSports"* and *"Do you know any of the rules and laws*

when it comes to doping", the open code tags are "strict", "needs improvements",

"ban-able offense" and "I don't know such rules".

    f.   For the ninth question, *"Who do you think should organize the anti-doping*

education for the players", the open code tags are "tournament organizers",

"personal behavior", and "gaming leagues".

    g.   For the tenth question, *"What would be your recommendations (effective tools)*

for dealing with doping in eSports", the open code tags are "life coaching",

"player education", "drug testing", and "penalties".

Third, it is important to reread the qualitative data and search for statements that fit into

any of the (Stage One) categories and then become more analytical, and look for patterns

and explanations in the codes. A coding template is defined to show the relationship

between different themes or codes. It is also important to explain how the deductive

themes fit with established theory and how the inductive themes could be organized to

show new directions that emerged from the data. Fourth, the raw data is reread for cases

that illustrate the analysis, also known as selective coding. During this stage, the need to

check whether the representative quotes from Stage Two is also aligned with the

established theoretical connections to the data from Stage Three. The representative

quotes will be presented exactly throughout this chapter.

4.2.3 Main themes

Throughout the data, noticeable themes arose in analysis when discussing forms of

cheating mechanisms and doping, which were viewed by the research participants as a

threat to the game's integrity and level of entertainment. However, facilitating conditions

on those themes is important. According to Jang and Byon (2019), eSports gameplay

behavior and media consumption intention is connected to different eSports events which

are (1) effort expectancy, (2) social influence, (3) hedonic motivation, (4) price value, (5) habit, and (6) flow and hence a better understanding to the emerged themes is presented. Those themes were:

1. Unfair affairs

This theme examined how the interviewees are encountered to aimbot, hacks, and cheats, which are third party programs and software that make the player frustrated over other players who want to gain an unfair advantage by not putting effort into practicing. This theme can be related and explained by the connection and similarity to the effort expectancy point that is mentioned by Jang and Byon (2019) as each eSports game has a different user interface, virtual background, and rules that eSports consumers need to learn and get used to the new information. However, if the learning process was too complicated or hard, then the gamer may give up on trying to play or in most cases start using aimbot and hacks and not put the extra effort into learning.

- *Aimbot*

Several participants had talked about how aimbot became very common nowadays to be used in multiplayer first-person shooter (FPS) games to provide varying levels of automated target acquisition to the player. Some participants had defined aimbot, hacks, and cheats as tools that lock onto the player and help the cheater to kill the opposing player with little to no effort. Other participants had explained why it is a corrupted act and how it works:

P1: "Aimbot is a sad thing and unethical. It is mainly because corporations are not taking this into account as an actual/main problem to dedicate a team to fix/solve this issue and help the community fight it".

P5: "Some aimbot can be toggled on and off as to not raise too much suspicion on the player using it, while others are completely blatant and far surpass the human limitation for flicking, tracking and reaction times".

P11: "The degree of unfair advantage varies but basically it improves their aim more than their actual mechanical capability".

- *Hacks and Cheats*

When asked about hacks and cheats, similar answers to aimbot were stated where it gives additional abilities that are not meant to be in the game. Many participants explained hacks and cheats as software that modifies the game data/files to give the player an edge in games. Some of the interviewees mentioned that it is a popular issue and gives players an unfair advantage in a game over other players who play without the programs.

P2: "For the past 5 years or so I have only played FPS games competitively and so due to that I have only been exposed to aimbotting, but I know that aimbot is not only used to cheat in gaming. The sky is the limit in terms of what hacking and cheats can provide, but the end goal is still the same, to give an unfair and unearned advantage to the person using it".

P14: "Action of pretending to comply with the rules of the game, while secretly subverting them to gain an unfair advantage over an opponent".

Some of the answers show that whoever uses such a cheating mechanism is because the person is too lazy or unwilling to put many hours a day to learn the skills that top pro players have. Moreover, a couple of the participants had stated and explained what some of those cheats do.

P17: "ESP allows the user to see player models through walls. This allows the user to know where enemies will be coming from at all times. Some very well made ESPs are also

able to display a player's health through the walls (I do not know how that works, but it is there)".

P18: "In Overwatch, there are some cheats that maintain momentum. For example, the character Lucio can be walking on the floor at the same speed if he is riding on the wall. There's also cheats that automatically execute abilities (such as a cheat that allows the character Dva to eat an ultimate)".

P20: "A rather new but very annoying cheat is called a magic bullet. This is basically where you can have your crosshair anywhere on your screen and the shot will still connect as a headshot. In other words, there are people that obviously miss, but are still able to nail a headshot without the crosshair flicking to the person".

The overall impression from the players was that the software ruins the joy of the game and makes the players angry.

2. Uncertain seriousness

For this theme, these two huge issues are unclear in regards to legalization and fairness. When it comes to ADHD medications, participants believe that it is harmful, unfair, a cheating mechanism, enhances one's performance, and should only be available to diagnosed ADHD patients as it is a more intense stimulate. However, this theme is connected to the social influence factor, which may play a role in the acceptance of those eSports players who voluntarily choose to use enhancement medications or energy drinks. When a huge part of the eSports society and professional players are willing to cheat to become better, then it becomes a norm and other eSports players will be encouraged to follow and feel like it is normal even if it is wrong.

P5: "It is 100% a performance enhancement drug and shouldn't be allowed in eSports. However, people who do use it for its intended purposes do not get the enhancement

benefit as someone who does have ADHD reacts differently than someone who does not. So as long as the person using it does have ADHD he or she should be allowed to compete, otherwise, it is an incredibly unfair advantage".

P17: "ADHD drugs aren't meant to be used for this kind of situation of physical/brain enhancement. In my opinion, it should be only available to diagnosed ADHD patients and it still makes it unfair to an extent due to the stimulatory effects of ADHD drugs like Amphetamine".

A couple of the participants had talked about how most of the pro players do use ADHD medications to enhance their performances. Two of the participant had said:

P6: "I'm going to talk about Adderall. There is no legal drug that equates to the amount of focus Adderall can provide. Most (if not all) pro players in the Overwatch League use Adderall. I can't speak for the CS:GO or Apex scene, but most of those players are probably prescribed as well".

P10: "It is everywhere at the highest level of gameplay".

One player had described ADHD medications as borderline cocaine from how strong the effect is. As for energy drinks, its strength is nothing compared to ADHD medications. Energy drinks make the player extremely concentrated and hyped up in a much safer manner compared to doing something like Adderall.

P8: "Energy drinks, according to my knowledge, is somewhat like Coffee (Caffeine) which increases your alertness and such but to normal levels".

However, there are many different opinions coming from the players who were interviewed as some believe it would be hard to claim a simple caffeinated drink as cheating while others believe that energy drinks should not be allowed. However, only one participant did not think any of those as doping stating:

P20: "Energy drinks are something normal like Redbull while doping is something a lot more serious like steroids, etc. so I don't think I would consider ADHD medications or energy drinks as doping".

3. Just winning

In this theme, the reasons behind why the participants choose to dope are explored and understood. Although the main reason the interviewees believed was the need to increase ones' performance in the game, however, being a professional in eSports requires having a 100% focus, dedication, and alertness to win therefore, obtaining superhuman reflexes and making fewer mistakes pushes the player to dope.

P7: "In every competitive sport, players will look for every possible advantage, and many will justify cheating for the sake of winning".

P10: "When you spend 12hrs a day for years perfecting your gameplay only to not be good enough, well, there aren't many words to express that feeling and not too many people alive can understand".

As professional players, being blind and eager to win the competition regardless of the consequences was another common answer. For some of the participants, investing fully into a goal and not reaching it would be catastrophic, as many people see no other alternative; it is either win or lose ones' entire lives pursuit. However, the surrounding environment, the mindset of the players, and the media, which commonly present unrealistic standards that normalize cheating to attain, is also a factor for doping.

P14: "You can execute your intended plays faster and with more precision than if you didn't use it. Competing or not, it enables you to do what you want and do it better. And if you are competing for money -- or with it as your job, then you are very likely to do it, especially if you believe your competitors are as well".

With that, this theme can be related to the price value, which is an important factor to consider. According to Jang and Byon (2019), if eSports players think that the perceived value based on the exchange of monetary cost to play an eSports game is worth it, the person may have a positive perception of his/her eSports gameplay intention. With the winning prize reaching millions of dollars and having high stakes of not being picked into the team, the eSports player is encouraged to do anything he/she can in order to win and not lose such prize just as stated by the research participants. Therefore, gaming intention is questioned.

4. Unspecified territory

This theme explained how all the interviewed participants believe that apart from being fined and suspended if caught cheating, there is a lack of laws and education when it comes to anti-doping.

P6: "When it comes to doping in eSports, it should be a zero-tolerance policy. If someone is caught doping, they should be banned by the organization hosting the tournament or event instantly".

Many of the participants believed that the laws were not enough, needed more reflection, improvements in addition to being more restricted, and monetarized. If eSports wanted to be considered like the NFL or the NBA, then they should follow the same doping regulations as they do. Therefore, the majority of the participants believe that undergoing a drug test like other sports before and after every game is very important.

P16: "Doping is banned from all sports therefore, should be the same for eSports".

Participants believe that the team's coach, WADA, the leagues, tournament organizers such as Activision Blizzard, Riot and Valve, the organization that the player is playing for, and the major sporting agencies should take the step in educating not only players but also the whole community.

P20: "Definitely the leagues themselves or tournament organizers. I believe teams would not be honest and trustworthy enough to self-educate and regulate their own players".

With no strict consequences, cheating and doping become a habit to millions of eSports players. Jang and Byon (2019) state that habit is a strong analyst of behavior. Not having a strong anti-cheating and ban system, fines, or serious laws is making many eSports players continuously cheat and not take doping as a serious act as there is nothing to lose inside the game such as game progress and achievements. Therefore, the concept of cheating habit is established, in which such behavior becomes automatic.

4.2.4 Simplified version of the template

Table 5: Main Themes

1. Unfair Affairs 1.1 Cheating Software 1.2 Instant Targeting and Locks	*"Aimbot is a hack injected into the game's system to grant the user lock-on tracking and almost 100% weapon accuracy".* *"Hacks and cheats in games are ways for players to unfairly gain an advantage over other players with the use of outside programs".*
2. Uncertain Seriousness 2.1 Fortify and Strengthen 2.2 Assertion of Focus and Morale	*"I have in the past tried both in my pursuit of tournament wins, and while energy drinks do provide energy and help with reaction times and aim, it is nothing compared to what ADHD does to you. It is borderline cocaine. Hence why I say Energy drinks are ok and ADHD meds are completely off the table".*
3. Just Winning 3.1 Taking Shortcuts 3.2 Unrealistic Standards 3.3 Immense Motivation	*"Constant pressure to perform better".* *"To not be removed from the cut-throat competition".* *"To maintain concentration over long periods of time looking at a screen and react at a moment's notice".*
4. Unspecified territory 4.1 Strict and Improved Punishments 4.2 More Laws and Rules	*"You cheat you are banned for life. You use Adderall or other prescription drugs that you are not prescribed to then you are banned for life".* *"Should be completely banned and players should undergo a drug test like other sports before and after every game".*

4.3 Discussion

After presenting the analysis of the research results, a discussion is conducted on the main topics that are relevant to doping in eSports while focusing on the research question that was introduced previously. The analysis concentrated on the opinion and knowledge that were obtained from the interviewees on different doping aspects. Overall, the profile of the research participant, which emerged from the interviews, was one who knows what the common eDoping methods are and does not support such action, understands what ADHD medications and energy drinks can do to a person, and believes that stricter laws and rules should be implemented against doping. This reflects on a similar recent cheating case that had occurred in 2018 at eXTREMESLAND where a member of the CS:GO team named "OpTic India" was caught using aimbot. According to Star and Bakshi (2019), the member had received a competitive play ban for two-years that was later reduced to 6 months instead. However, in an 8-months span, the member was caught cheating again. Star and Bakshi (2019) had mentioned how this example highlights the need for improvement with respect to regulation and enforcement wherein traditional sports; the consequences of such blatant and intentional cheating would most likely have been more stringent. In 2018, another huge cheating case occurred in one of the world's biggest eSports competitions for the game PlayerUnknown's Battlegrounds (PUBG) were more than a dozen professional gamers were caught cheating and using a radar hack to watch the enemy players to win $2 million. According to Swns (2019), the professional gamers had used a virtual private network (VPN) to read the opponents' data where it was unpacked and fed into a separate program allowing the gamers to watch it from their phone. However, the gamers were later on caught and PUBG started investigating more

and banning more than 30,000 of non-professional players due to this cheating scandal (Swns, 2019).

A professional eSports player named Jarvis Kaye from the famous team "FaZe Clan" was faced with a lifetime ban from the game Fortnite after he was caught cheating in many of his videos online. Kaye had said that his purpose was to create entertaining videos and did not put into consideration the zero-tolerance policy. This had made the famous professional eSports player named "Tyler Blevins" known as Ninja, to state his opinion: "There's a difference between a content creator who has millions of subscribers, hundreds of thousands of followers, who gets banned from literally what makes him money and some kid who has absolutely zero followers. You ban that kid, nothing happens to him but you ban Jarvis, it is different. The stakes are different; it should be handled a little bit differently. You ban one you ruin his life. You ban the other; he makes another account and keeps cheating. It is different. It has to be handled differently". However, later on, Ninja said he regretted his comment and stated that the ban should 100 percent be there but punishment for minors who cheat should be different just like in the legal system (Doolan, 2019).

Unfortunately, according to Prestia (2017), it is not easy to detect cheating due to the nature of the act where it is not always clear enough to immediately be noticed without being trained, thoroughly analyzing the match, or with special software (Prestia, 2017). There are many different anti-cheat software and other tangible solutions that prevent eSports players from cheating however, the game developers themselves have to make sure that the game is immune from third-party and custom-made hacks which not all game developers apply. The continuous cheating can damage the confidence in the eSports industry and decrease the popularity of online tournaments.

Arslanian (2019) mentions that cheating in video games is similar to "playing a high school baseball game and a freshman on the opposing team hit the ball over the fence 100% of the time, threw 110 mph, and caught literally every batted ball". This leads to the person to be annoyed if that happened so many times of the games he/she played in and will eventually feel the need to install cheats to compete, which results in more cheaters and more players quitting the game. Therefore, it is discouraging to eSports players who are trying to play the game fairly.

In this study, many of the research participants had stated that some organizations such as ESL and Overwatch League had banned doping but they do not know any doping laws apart from a temporary ban in addition to a fine and believe that it does not reflect on what eSports truly is. The participants believe that no one should have any form of third party enhancement when it comes to an official tournament. However, many of the research participants stated that there is a need for stricter regulations, more monitoring, and testing against doping especially that eSports has performance-boosting properties. Therefore, eSports should undergo drug tests before and after each game just like regular sports leagues especially if eSports want to be considered as the NFL or NBA.

The research participants had added that personal behavior and school environments interfere in the player's education against doping were for some the use of legal and illegal drugs were normal in school while others were forbidden. Many of the research participants had mentioned that WADA, eSports teams/organizations/leagues, and doctors should take the initiative to educate players about anti-doping and explaining the side effects and toxicity, that doping can have on the body in general. Gill and Vaughan (2020) had compared traditional sports with eSports stating that similar to how athletes use corked bats, deflated footballs or cameras to know what pitch is coming up next,

gamers cheat to gain knowledge of their opponent's strategy. Similar to what Ghoshal (2019) had stated, with the increasing popularity and the competitive nature of eSports, the industry needs to have a uniform set of rules regulating eSports. This could be achieved by recognizing eSports as being equivalent to traditional sports in the relevant jurisdictions. Thereby, making the traditional sport's laws applicable to eSports or forming and implementing a uniform code of ethics similar to WADA, where individual states can subscribe to; would reduce the costs associated with every region developing its own eSports league and having to form their own code of ethics, which is similar to what had mentioned by the research participants (Ghoshal, 2019). However, Ghoshal (2019) argued that there are many reasons why a uniform regulatory code would be difficult to be established. First, video games, unlike traditional sports, remain the intellectual property of game developers. Game developers have the right to do as they please with their property, including tweaking the rules of their tournaments. A fixed law and regulation would limit this freedom, which could effectively be considered state intervention on intellectual property (Ghoshal, 2019). According to ESL (n.d), the world's largest eSports company, to maintain a fair play spirit in eSports, ESL has partnered with NADA (Nationale Anti-Doping Agentur, Germany) to help research and find an anti-PEDs policy that is fair and respects the players, while providing results at the same time. Additionally, ESL (n.d) works with WADA to enforce and further internationalize the policies created to different regions like the US, Asia, and Australia. Therefore, ESL had started using the expertise of NADA and WADA to create a performance-enhancing drug (PEDs) prevention program, which will be implemented in all ESL eSports competitions. Therefore, the future of having universal fixed doping regulations and laws is yet to be agreed on. However, for instance, the culture of eSports

in South Korea is more established therefore, there were dedicated legal bodies who were hired who have the responsibility to fight doping. Koryzma and Lesniak (2019) had mentioned that South Korea had introduced a login system to link virtual accounts to real persons to ensure responsibility for criminal acts and for instance, boosting for profit is punished by imprisonment with labor for not more than two years or by a fine not exceeding $18,000. Similar to China, according to Gill and Vaughan (2020), game developers have effectively promoted and collaborated with legislators to criminalize certain acts of cheating in addition to punishing whoever creates and distributes hacks by significant fines and jail time. On the other hand, in the United States, game developers rely on the end-user license agreements (EULAs) or allegations of copyright infringement. Therefore, if a player cheats, this means that the code of the game has been modified and the user-created an unauthorized derivative work and infringed the copyright held in the original work.

Moreover, the research participants understand how eSports requires a huge part of one's life and dedication. This study had reported that many professional/nonprofessional players use aimbot, hacks, and cheats as a way to gain an advantage that does not come from practicing the game. It was stated by a few of the participants that injecting the computers with cheating programs increases one's focus and alertness during the games to get stronger reflexes and fewer mistakes. Participants had mentioned that cheating programs could execute ones' intended play faster with more precision than when not used and if the person is competing for money or taking gaming as a career, then one is likely to cheat, especially if one believes that competitors are cheating as well. Moreover, participants believe that players cheat are those who are not willing to be consistent and failing to achieve a certain level expected. More reasons were also that some are not

willing to put the extra effort to improve their own skills, could not reach the required level of high performance to compete competitively, facing psychological pressure and personality issues. Similar to what ESL had stating saying that "The popularity and visibility of eSports have grown exponentially in recent years, but this combined with the increasing size of prize pools has also made the temptation of rule-breaking even greater" (Hatamoto, 2015). Langley (2016) has also added to these reasons moral clauses in sponsorship and player contracts. Aimbot, hacks, and cheats according to the opinions collected in this research, is used to give the user an instant kill by automatically aiming at the opponent's head and having additional abilities such as wall hacking. De Carlo (2019) had explained the psychology behind cheating where hackers have the desire to win regardless of the cost and what is used to achieve victory. Hackers do not feel bad for cheating but rather smart, as they were able to trick everyone including the anti-cheat system. Hacking feels to some like a badge of honor.

Furthermore, many of the research participants had mentioned that they know many professional teams where they use ADHD medications for the same reasons for using the cheating programs. In addition, these medications provide more energy, help with reaction time, maintains concentration over long periods of time looking at a screen, helps in reacting at a moment's notice, and give better aiming. Just like in a previous interview, a professional CS:GO player named Kory Friesen had admitted that he and other players had taken Adderall during a tournament stating " Nobody talks about it because everyone is on it. We were all on Adderall. I do not even care. It was pretty obvious if you listened to the comms" (Langley, 2016). Another professional Halo player named Matthew Murphy had admitted to using Adderall saying "Typically I would be exhausted, tired and lose motivation after only a couple hours. With Adderall, I am able to play better than

I ever have for up to 12 hours" (Hamstead, 2020). The need to have a faster reaction time in order to be part of the harsh competitions and failing to achieve the expected level of performance was reported to frequently lead to doping by the person in this research. The opinions of the research participants in this study are similar to Luongo (2018) where he states that with prize winnings spanning from thousands to tens of millions, motivation for wanting to win unfairly seems clear. For Arslanian (2019), cheating might be a bigger problem in eSports compared to traditional sports. The beginning of the issue lies in the basis of eSports were the players don't play in teams when he/she starts the eSports career as it is only the gamer and the computer. On the other hand, in traditional sports, for instance, youth baseball, Arslanian (2019) states that from day one, the person is held responsible. The umpires, coaches, and teammates will teach the person what is right and wrong and help in preventing the person from cheating. This form of structure and responsibility is not found in eSports, as cheating is normalized from the amateur level. However, there are so many significant reasons. When it came to energy drinks, just like ADHD medications, a study made by Thomas, Rothschild, Earnest, and Blaisdell (2019) stated that energy drinks weaken mental fatigue and improves performance by maintaining alertness and wakefulness as it contains caffeine with other substances. The use of an energy drink improves the cognitive and physical performance where the mental fatigue accumulated through playing a lot would result in a decline in performance and therefore, the use of an energy drink would reduce this decline. In this study, some of the research participants have stated that energy drinks are the main source of wakefulness that comes out from caffeine, which depending on dose can cause alertness. Few of this study's participants believe that energy drinks depending on the ingredients used, are a quick and convenient way to enhance ones' performance without indulging in extreme

substances. Few of the participants had explained how energy drinks are a grey area and would be hard to claim a simple caffeinated drink as cheating since caffeine exists in other things such as tea and apples and can be acquired at any store due to being legal to do so. According to Loria (2016), a Halo player, Tyler Mozingo, had stated "A lot of players resort to energy drinks and other people resort to Adderall". He also had admitted that he used Adderall in tournaments without a prescription. However, even though energy drinks do lead to euphoria and confidence in ones' own gaming skills, the feeling does not last. EAthlete Labs (2017) mentions that after the second game, the energetic and twitchy feeling is still there, but the euphoria and confidence feelings had disappeared while after the third game, it was more of an energy drink hangover, nervousness, sickness, and foggy feelings. As a result, energy drinks are great at first but after one hour, it tears the person down and lowers ones' performance rate.

Finally, all of the research participants of this study had given a few recommendations and effective tools on how doping in eSports can be dealt with. The participants had made it clear that life coaching and drug tests are necessary in addition to more strict regulations against energy drinks. In addition, fining the organization for allowing their players to dope, extreme punishment for cheaters, such as retroactively removing any of their winnings and a lifetime career ban, player education, and parents' guide is needed. One of the participants had pointed out that most eSports players are very young and are still developing. They may not understand the full consequences of their actions, so they should be helped and bring to light the harm that doping has on them. Another participant had recommended that the player should not surround him/her-self with the wrong influences. Remove oneself from potentially harmful situations is the key. The opinions that were gathered are similar to what Stark and Walkowiak (2019) had mentioned saying

that players, coaches, referees, official bodies and other members may need to be trained and educated on the risks that could happen, what and how illegal schemes can be prevented, the eSports rules in general, and what is expected from each entity. However, it should not stop here. Continuous monetarization, following up, and evaluation must be made from the eSports organizations in order to reduce such corruption. Players, teams, and management should always assess the gameplay and performance whether it follows the framework or not. If any threats had been identified, legal investigations and procedures should take place (Stark & Walkowiak, 2019). Similar recommendations were stated by Bhargava (2019) saying, "There must be a more joined approach to governance, with the establishment of one global standard set of regulations to replace the piecemeal approach adopted by different leagues and tournaments. A combined regulatory body within eSports would be able to standardize doping and diminish inter-league uncertainty in terms of enforcing sanctions and if eSports is to be truly recognized as a legitimate sport, then it needs to be regulated in a similar fashion. Moreover, the morality clause' should be included in contracts that would allow for termination of an individual caught doping from sponsorship and playing contracts. Also, there has to be an effort towards educating players about the risks and potential consequences of doping which will help in fostering an anti-doping culture among the players and the industry must keep pace with the technological advancement and ensure that it's anti-cheat software are up-to-date to keep a check over 'mechanical doping". However, until a proper law is established, there should be a mutual recognition any sanctions imposed on a player by a league should be recognized by all other leagues. On the other hand, one important problem to consider is that there are many professional gaming leagues like the League of Legends Championship Series, who do not have a formal policy for drug

testing. Gaming organizations like Cloud9 also participate in those tournaments. Therefore, many organizations can be involved in many different leagues at one time, which leads to huge exploitation opportunities (Hockenson, 2015). Another main problem with regards to testing the players is that many of the competitions are made online where players compete remotely, which makes the testing difficult. Most of the testing is done only where players are present at the same venue to compete and therefore there is no way of knowing if doping is a problem in the lower tiers or to keep a check over mechanical doping (Bhargava, 2019).

4.4 Limitations

As eSports is still a new industry with an increase in popularity and importance, the main limitation found within this research is the limitation of the field in itself. Therefore, not so many studies or data can be found. In addition, there was a limitation in the games that the study participants compete professionally in were there was only 4 games that were mentioned that are Overwatch, Mobile Legends, CS:GO, and Apex Legends. Other games such as Dota 2, League of Legends, Call of Duty, and many more were ignored which might have different laws and rules on how the competitions are conducted and how doping is dealt with. Another limitation is that all of the research participants were males and no females. Even though there are female professional players. However, this study only examined the opinions of the male players, which might be bias towards the eSports industry as a whole. Furthermore, the opinions that were gathered are from 4 geographical regions which are North America, Europe, Asia, and Africa and not in all parts of the world therefore, the opinions may be limited and it is difficult to draw generalizations about an entire demographic.

Chapter 5
Conclusion

5.1 Introduction and purpose

This chapter will conclude and summarize the research project and research question in addition to reflecting the importance of the study, the methods used, the findings obtained, future applications, and the importance of further study in the area of doping in eSports.

5.2 Summary

Doping in eSports represents a huge and significant challenge to the management and development of the industry. The increase in global audience and the popularity of eSports had made eSports on the same level of the traditional sports, which highlights the need to manage the threat and possible corruption factors that can damage the integrity and the reputation. It is very important for eSports leagues, companies, federations, teams, and players to be aware of the potential effect that doping has. With the increase of money invested and made during eSports competitions, and having the need to build a community of followers as a streamer, the incentive to cheat is stronger than ever (Gill & Vaughan, 2020). Therefore, how quickly the player can read the competition's moves and react in addition to being able to focus on the game at hand and then calmly and swiftly maneuver to victory is important (Toomey, 2019). In this context, this research begins to address corruption in eSports focusing mainly on doping and analyzing the eSports players' perception when it comes to doping in an effort to understand and know the threats that will be on the integrity of eSports. Based on the proposed definition of doping which is the use of drugs to enhance the performance, attention, mental ability, and the

brain capability, this study has attempted to identify types of doping in eSports context, explore how the players use those doping mechanisms during the games, and to state how different types of doping serve different functions. With that, the research question: "Is doping a potential threat to the integrity of eSports?" could be answered. Hence, this research has sought to state and identify the main doping methods that are used, reasons behind why eSports player dope, and popular scandals and integrity issues faced throughout the years. This provides a new understanding of what consequences can happen to the eSports players and industry due to doping as well as identifying the roles of eSports leagues, federations, and teams in the process of responding and dealing with doping. To address the corruption eSports, first, there was a need to explain and develop a contextual understanding of corruption in traditional sports. It was important to draw a connection between these two phenomena to show how similar yet unique both are. With this, it showed that doping in eSports is an important area of research that has yet to receive much-needed attention. Therefore, this study was an interpretive in nature and qualitative-oriented as the opinions and knowledge gained cannot be measured. The focus was on the motivations and the reasons behind the views and attitudes of the eSports players when it comes to different methods of doping. This was done by conducting an online interview (the use of primary data) with 20 professional eSports players to ask open-ended questions regarding their knowledge on eDoping techniques, views on ADHD drugs, reasons behind why a player dopes, and whether there is any education or laws in that matter that they are aware of. After that, a five-step template analysis was used which includes arranging the data after collection based on the questions asked, setting up codes, and validation. With that, throughout the data collected, four main themes emerged which were: unfair affairs, uncertain seriousness, just winning, and

unspecified territory. Analysis of the interview data indicates that being part of eSports requires a huge part of one's life and dedication. Therefore, many professional/nonprofessional players use aimbot, hacks, and cheats in addition to energy drinks and ADHD medications as a way to increase one's focus and alertness during the games to get stronger reflexes and fewer mistakes to gain an advantage over other players. Common reasons to cheat were that some players are not willing to put the extra effort to improve their own skills, could not reach the required level of high performance to compete competitively, facing psychological pressure and personality issues. However, unlike ADHD medications were all research participants believe that it should be considered as doping, it is hard to claim energy drinks as cheating. With this, the participants had made it clear that there is a need for firmer rules, punishments for players, more monitoring, blood testing, life coaching, and stricter law against energy drinks especially if eSports wants to be considered as the NFL or NBA.

5.3   Contribution to Knowledge

Going through the literature of corruption in eSports, there have been different attempts to identify the backgrounds and indicators of doping that have been highly emerging and problematic to the industry. Therefore, this research can help in acting as support to this new challenge by identifying different doping mechanisms used and stating the knowledge and opinions of professional eSports players. This research adds value to the current understanding. However, there is a lot of work to be done when it comes to doping in eSports, most notably in establishing fixed and strict anti-doping laws and regulations against cheaters. This research aims to provide an understanding that there is a lot of missing literature when it comes to corruption in eSports in general and specifically doping as this new challenge is still an undeveloped area of academic research and lacks

examination. In this research, it stated that doping in eSports represents a huge part of the official and nonofficial competitions and matches. With the effective strategies, laws, and control by eSports federations and leagues in addition to public awareness, a fixed anti-doping law and strict consequences could be established making whoever wants to cheat hesitant. Moreover, this study represents one of the few attempts to examine the challenge of corruption in eSports with a focus on doping. Many of the other corruption in eSports literature focus on gambling, match-fixing, and lootboxes. Until now, there have been few attempts on trying to establish a common anti-doping law so eSports teams and leagues can use.

5.4   Implications / Recommendations

The main aim of this research was to know the perception and knowledge of eSports players when it came to doping are and whether doping affects integrity. By gathering feedback from professional players, this research has helped in developing a detailed understanding of why doping happens in eSports and what needs to be improved or changed. Future recommendations that can be done by eSports organizations are the following:

1. Educating the players.

2. Creating strict laws and appropriate consequences in regulations.

3. Being more persistent and harsh, that breaking the fair play rule will lead to a lifetime ban from the game and copyright violation.

4. Creating a well-organized process and system for banning the cheaters.

5. A continuous upgrade and up-to-date software and hardware anti-cheating system injected in video games.

6. Hunting down websites that sell/create cheating programs.

Hence, eSports organizations should:

1. Create a prevention program, provide books and videos that educate all gamers what doping is and the risk associated.

2. Give the needed support that helps in managing the physical and emotional pressure that comes from gaming.

3. Encourage coaches to educate their players, take full responsibility, and hire a team doctor or psychologist if needed.

4. Make sure that computers have an anti-cheating system installed in the servers and have more than one admin watching behind the players to catch any suspicious activity during official competitions.

5. Conduct drug and skin tests before and after competitions.

6. Make sure that video game developers have a strong program that checks the player's software input cheats in addition to drivers (that improves the gaming experience), hard drives, network (internet access windows), whether VPN is used or not, and compares the player's keyboard/ mouse input with the information that the game is giving.

7. Should speed up the work with WADA to establish an official anti-doping list specifically for eSports players.

8. Hire a dedicated team should track and shut down the websites or legally fight the websites.

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Appendix (1)
In-Depth Interview Questions

1. Can you tell me what you know about:

   a. aimbot in eSports

   b. hacks and cheats in eSports

2. What is your view about "ADHD drugs" that players use to enhance their performance?

3. Would you considered ADHD medications and energy drinks as doping in eSports?

   a. Is there any difference between these two?

4. In your opinion, what are the reasons behind a player doping?

   a. Do you think players who set themselves excessively high and unattainable goals might be more at risk for doping?

5. What is your view about rules and laws when it comes to doping in eSports?

   a. Do you know any?

6. Who do you think should organize the anti-doping education for the players?

7. What would be your recommendations (effective tools) for dealing with doping in eSports?

Appendix (2)
NSD's Approval Form

NSD NORSK SENTER FOR FORSKNINGSDATA

NSD's assessment

project title

Corruption in eSport - Doping

reference number

250853

Registered

08.01.2020 av Arwa Abdulaal - arwa.abdulaal@gmail.com

Responsible institution for treatment

Molde University College - School of Science in Logistics / Department of Logistics

Project manager (scientific employee / supervisor or fellow)

Christos Anagnostopoulos,
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Type of project

Student project, master's degree

Contact information, student

Arwa Abdulaal, arwa.abdulaal@gmail.com, tlf: 96712431

project period

01.12.2019 - 11.05.2020

Status

05.02.2020 - Rated anonymously

Rating (1)

05.02.2020 - Rated anonymously

It is our assessment that this project will not process data that can directly or indirectly identify individual persons, so long as it is carried out in accordance with what is documented in the Notification Form and attachments, dated 05.02.2020, as well as in correspondence with NSD. As a result, the project does not need an assessment from NSD.

WHAT DO YOU NEED TO DO IF YOU ARE GOING TO PROCESS PERSONAL DATA?
If the project is changed in such a way that you will process personal data, you will need to notify this to NSD by updating the Notification Form. Wait for a reply before you start processing personal data.

END OF FOLLOW-UP
As the project will not be processing personal data, we end all further follow-up of the project.