

The Ethics & Morality Behind Cheating in Video Games

by

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Games Design)

Declaration

I, Hamza Qasim, declare that I am the sole author of this Project; that all references cited have been consulted; that I have conducted all work of which this is a record, and that the finished work lies within the prescribed word limits.

This work has not previously been accepted as part of any other degree submission.

***Date:** 21/04/2024*

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Glossary of Terms

Term	Definition
Local Area Network (LAN)	A LAN is a collection of devices connected together in one physical location.
Internet Protocol (IP)	IP is the code used to label packets of data sent across the internet, identifying both the sending and the receiving computers.
Fear of Missing Out (FOMO)	A feeling of anxiety or insecurity over the possibility of missing out on something, such as an event or opportunity.
Soulslike	A subgenre of action role-playing games known for high levels of difficulty and emphasis on environmental storytelling, typically in a dark fantasy setting.
God Mode	God Mode is a type of cheat in video games that makes your character invulnerable and invincible.
OHK	OHK means One-Hit Kill, to be able to eliminate an opponent in a single attack.
Wallhacks	A patch enabling a player to cheat by modifying the properties of walls, as by making them transparent or nonsolid.
Aimbot	A program or patch that allows the player to cheat by having his/her weapon aimed automatically.
Triggerbots	A hack that shoots for you when your crosshair is on the enemy.
Random Number Generator (RNG)	A random number generator (RNG) is an algorithm that produces random numbers. In video games, these random numbers are used to determine random events, like your chance at landing a critical hit or picking up a rare item.
Bufs	When something boosts your powers or status in a game, you talk about getting buffed or acquiring a buff.
Synergy	The interaction of elements that when combined produce a total effect that is greater than the sum of the individual elements

Armour Mods	Armour Mods are what enable your character in Destiny 2 to spawn Orbs of Power, enhance their finishers, increase their damage resistance, and generally improve ability uptime.
Super Energy	Super energy is required in Destiny 2 to fill the super bar in order to allow players to utilise their ultimate ability.
Fragments	Sub-sections of a subclass which give passive bonuses.
Subclass	A player class-specific, upgradeable, and interchangeable bundle of abilities and characteristics used by Guardians in Destiny 2.
Exotic Armour Pieces	Designated with their bright yellow icon, are the highest-tier gear that you can acquire in Destiny 2. Most have unique abilities.
Griefing	The action or an act of deliberately spoiling other players' enjoyment of a game by playing in a way that is intentionally disruptive and aggravating.
Trolling	When players go out of their way to annoy everyone and make other players rage.
Mouse and Keyboard (MnK / KBM)	KBM and MnK are common acronyms for mouse/keyboard input.
Aim Assist	Automatic adjustment to aim to improve accuracy.

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Abstract

The project as a whole will be looking at the ethics and morality behind an individual's intention to cheat in a video game. There are several theories to further understand why this is a controversial topic such as but not limited to:

Virtue Ethics: A term first coined by the philosopher Aristotles ^[1], this theory suggests that cheating in video games can harm a player's character and moral values, leading to a lack of integrity and honesty ^[2].

Fair Play: As summed by A. John Simmons in The Principal of Fair Play ^[3], most citizens within a just community have moral obligations and a need to obey the law and follow just rules. This theory suggests that cheating in video games violates this basic law and undermines the integrity of the game ^[4].

Cognitive Science: Celia Hodent ^[5] is one of the main researchers in this field, which explores the psychological and cognitive factors that contribute to cheating in video games, such as competitive motivation, self-esteem, and aggression ^[4].

Cyberpsychology: Berni Good is a former member of the games industry and an expert cyberpsychologist that has been investigating psychology in game design for a good part of her career now ^[6]. This field of research explores the social and psychological aspects of gaming, both online and offline. This field primarily focuses on the significant behavioural and attitude changes a player may develop when cheating or playing against cheaters ^[7].

Game Design: This field of research explores how companies in the industry use in-game purchases and monetisation mechanics as a form of either promoting or preventing cheating ^[8]. It can be seen as prevention when the pay-to-win items are available to everyone who spends

money but can be seen as a way to promote cheating to players who believe that pay-to-win items should not be available in competitive games ^[9].

Social Network Analysis: This field of research focuses on the social dynamics of cheating in online games as well as the use of social networks to advertise and sell cheating programs and influences players' behaviours to cheat ^[10].

Some of the notable researchers who have done similar work to the specific topic focused in this project are members from the University of Bamberg who presented their report at the Hawaii International Conference on System Sciences this year. They used a more statistical approach to this topic and mainly focused on the revenue loss for publishers in the games industry ^[11]. This project will be looking at the more theoretical side of things as well as psychological, behavioural and societal issues that may arise when a player decides to cheat in a video game.

Chapter 1: Introduction

1.1 Aims & Objectives

1.1.1 Aims

The aim of this project is to investigate the impacts on the lives of players who choose to cheat in video games, with a focus on changes the player may go through. The project will explore the ethical and moral concerns surrounding cheating in games as well as examine how using cheats or hacks affect other players in a multiplayer game.

1.1.2 Objectives

1. To identify the reasons why players cheat in video games.
2. To examine the impact of cheating on the player's mental health and personality.
3. To explore the social impact of cheating on the gaming community as a whole.
4. To analyse the ethical and moral concerns surrounding cheating in games.
5. To examine the effects of cheating on other players in a multiplayer game.
6. To identify alternative solutions to cheating in games.

1.2 Hypothesis

The hypothesis for this report is that cheating in video games leads to negative social and mental health consequences for players. This may include increased isolation, negative personality changes, and a decline in overall mental well-being. Furthermore, cheating in video games may be considered ethically and morally incorrect, as it can negatively impact the gaming experience for both the cheater and other players involved in the game.

This hypothesis is supported by research that suggests cheating in online games can lead to de-socialisation of gamers and adversely affect game brands^[12]. Additionally, studies have shown that cheating in online games is associated with specific personality traits, such as the dark triad traits, which can lead to negative behaviours^[13]. Cheating can also erode trust and integrity within the gaming community, and negatively impact the overall multiplayer experience^[14].

Chapter 2: Literature Review

2.1 Social Impacts

When players cheat, it can create a domino effect of negativity, as stressed players may take out their frustrations on others. This can lead to a toxic gaming environment, driving away legitimate players who may feel that their gaming experience has been ruined by cheaters. Furthermore, cheating can result in players being blacklisted or receiving a bad reputation, which can affect their ability to participate in the gaming community^[15].

2.2 Gaming Experience for Other Players

Cheaters can significantly affect the gaming experience for other players in various ways. Some of the main effects include a loss of trust in the game and its community as cheating undermines the innate ethical values of competition and fair play, eroding trust and integrity within the gaming community^[16]. Cheating can also hinder the development of skills for legitimate players, as they may struggle to compete against cheaters who have an unfair advantage^[17]. This leads to a negative impact on the overall multiplayer experience, leading to decreased enjoyment and satisfaction for players^[18]. Which then, in turn, can cause legitimate players to feel frustrated and angry when encountering cheaters, potentially affecting their overall gaming experience and even their mental well-being.

2.3 Consequences for Cheating in Video Games

Cheating in video games can have various consequences for players such as penalties from game developers, like banning players from the game or resetting their progress^[19]. It can lead to a loss of reputation within the gaming community, potentially affecting a player's ability to participate in the community^[20] as is the case with many pro players who have been caught cheating like Nikhil “forsaken” Kumawat who was caught cheating in a *CS:GO* LAN

tournament and Johnathan Kosmala of *Team Kaliber* who was using wallhacks during the *Fortnite* World Cup 2019.



Figure 1. Forsaken Caught Cheating

Malicious users like these and many others then in turn negatively impact the gaming experience for legitimate players, leading to frustration and decreased enjoyment^[21]. This can lead to a loss of revenue for game developers, as players may be less likely to interact with in-game content if they encounter cheating^[22]. In some cases, cheating may violate end-user licence agreements, leading to potential legal consequences^[23] as is the case with Lee “Life” Seung-Hyun who was involved in a match fixing scandal within a *Starcraft II* tournament that lead to a sentence of eighteen months in prison, a three year ban from the game, a lifetime ban from any *KeSPA* tournaments and a £51,000 fine^[24].

2.4 Effect on the Gaming Industry

Cheating in video games can have a significant impact on the gaming industry as a whole. Some of the ways that cheaters affect the industry include a loss of revenue as other

players are less likely to continue playing the game or put their own hard earned money into a game when they encounter players who cheat. This can also lead to a negative impact on the reputation of the game itself, for example, *Call of Duty Modern Warfare 3* is renowned for “*out of control cheating*”^[25], essentially tagging the game as an avoid for the majority of players that do not own the game. Moving forward with this game in mind, as cheating becomes more prevalent, the community voices its outcry to the game developers with an increased demand for anti-cheat thus putting the developers under pressure to spend more time and money on a push for better anti-cheat measures to combat malicious users. This in turn leads to a creation of a sub-economy for cheaters as they can purchase digital tools and modified versions of the game code to gain an unfair advantage once again.

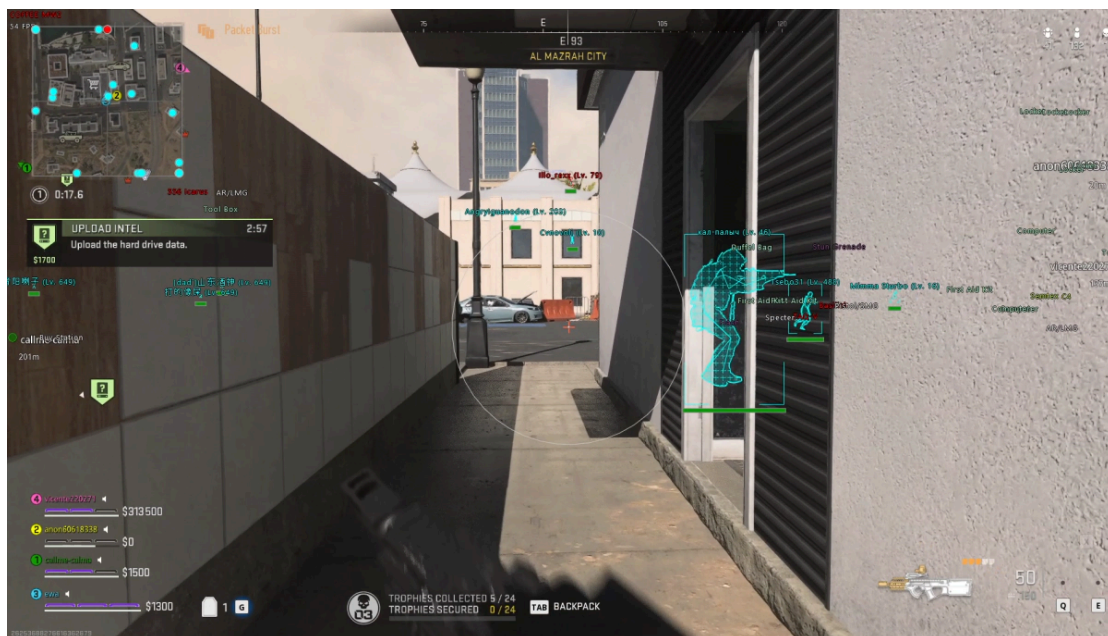


Figure 2. Wallhacks in Call of Duty Modern Warfare 3

Ignoring *Modern Warfare 3* for a moment, this seems to be an endless ongoing battle between cheaters and developers. Anti-cheat can only do so much and if malicious users on PC in particular are turning to kernel-level cheats (cheats that operate at the deepest level of a

computer, that being the kernel) that are difficult to detect as they operate above the level of normal apps^[26]. Kernel-level cheats can directly interact with and manipulate system components like modifying game memory, intercepting and altering network traffic and injecting code, thus being able to bypass normal security measures. As with any other cheating software, kernel-level anticheats provide an unfair advantage that undermine the integrity of the game and the competitive experience for other players.

To combat kernel-level cheats, game developers have to essentially fight fire with fire by making sure that the anti-cheat software is also kernel-level. This means that again, it is a cheat detection software running at the deepest level of the system to prevent cheating. Whilst this is great in regard to combating malicious users who intend to cheat, in games such as *Riot Games Valorant*, it raises ethical, privacy and security concerns for other players just enjoying the games. The invasive nature of such an extreme measure feels like a violation of a user's privacy and one's personal autonomy.

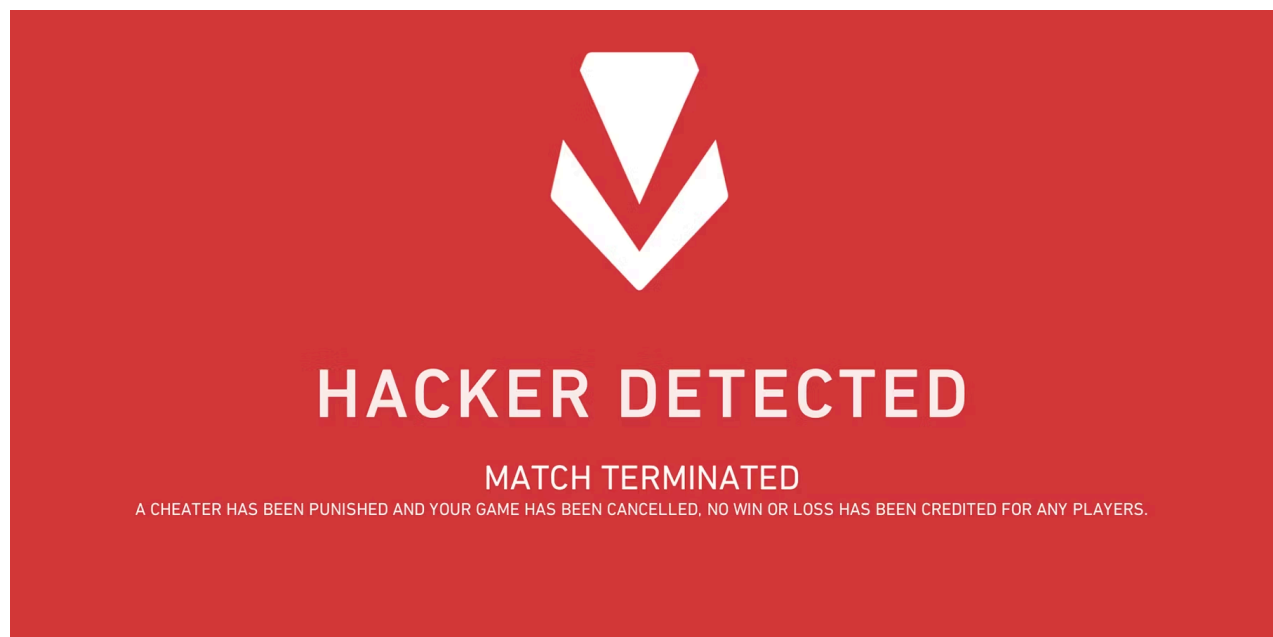


Figure 3. Valorant Anti-cheat Measures

In order to address and mitigate these concerns, game developers can explore alternative anti-cheat solutions that do not involve kernel access in any way, shape or form such as server-side validation, behavioural analysis and hardware-based approaches. Artificial intelligence tools can also be used to pick up on trends within a users gameplay history and flag suspicious accounts, these flagged accounts can then be checked and verified by a team of humans to make sure that any repercussions are not done mistakenly or based on AI alone. This would be the solution in an ideal world, the human resources needed to undertake a responsibility of this magnitude would not be feasible in the real world. Though this is merely an example of what could be done to mitigate the concerns with kernel-level anti-cheat software, the more easier and cost effective method would be to employ hardware bans and IP bans for users who keep reoffending thus permanently barring them from the game^[27].

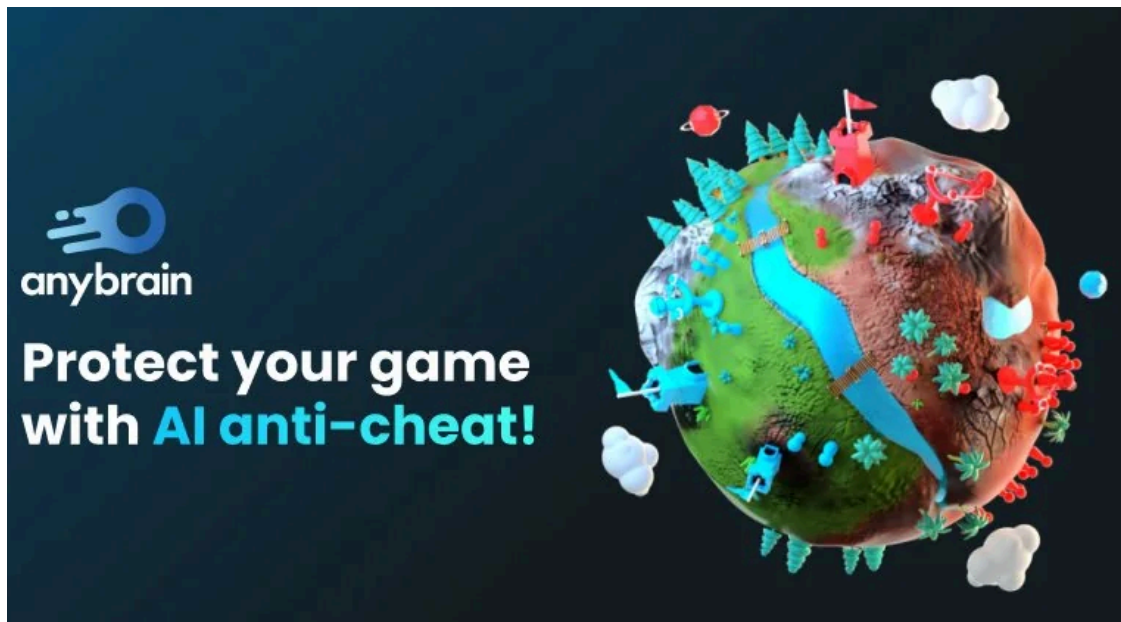


Figure 4. Anybrain AI Anti-cheat

2.5 In-Game “Cheats”

There is some evidence suggesting that players may be less likely to cheat using third-party software if the game has built-in cheats. Games like *Minecraft* and *Valheim* with their

creative modes, *The Sims* and *Skyrim* with an in-game console, *V Rising* and *Palworld* with their interchangeable options within the server settings, allow players to access and use options that often make the respective game a lot easier to play, or soften the blow of grinding in some way.

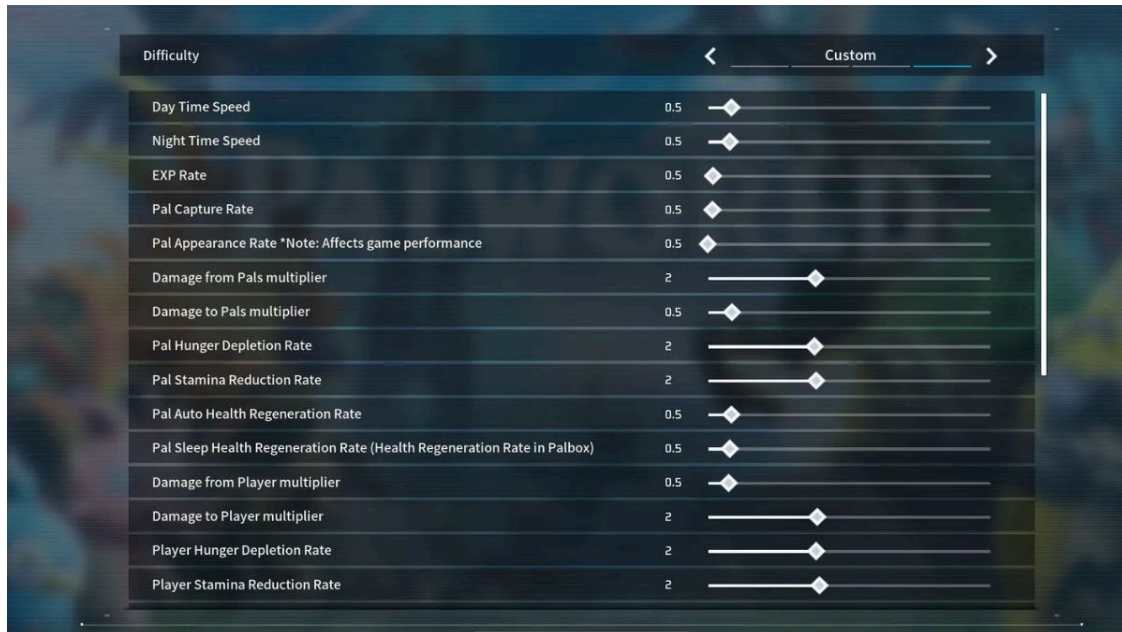


Figure 5. *Palworld* Server Settings

Players would be less inclined to cheat if they already have such easy access through the game itself. However, it's important to note that the effectiveness of built in cheats in deterring cheating is limited. Humans innately have a drive to outdo others and succeed themselves, meaning that some players may often opt to use third-party software to gain an unfair advantage regardless of whether or not they had access to in-game cheats thus leading to in-game cheats within games having unintended consequences^[28].

2.6 Reasons to Cheat

An unwritten rule of most gaming communities is for everyone to play fairly, uphold their own integrity and not diminish the value of the competitive multiplayer scene by cheating. However, this can lead to some people being overly competitive and this competitive motivation

can go as far as winning by any means necessary even if that includes cheating to gain an advantage over their opponents. Highly motivated players aren't the only case of cheaters, the entire opposite is also something to be considered, players who have low self esteem may also be more likely to cheat in order to prove their worth to others in the form of online validation from strangers. This act of cheating may also make players with low self esteem feel better about themselves, thus giving a false sense of hope and security for their future in gaming. Another key factor in the reasons to cheat is aggression, players who are quite aggressive can cheat as a form of retaliation towards those they lost to, they tend to not view this as cheating and instead as an act of revenge for having taken a loss^[29].

A major factor in the reasons to cheat is because players do not view the online world as real. They feel as if they are free from the restrictions of societal norms within reality and thus feel less accountable for their actions. This has been an ongoing discussion within the topic of cheating as to whether people should feel real life repercussions for their actions online. Though this can essentially be applied to anything being said and done online, because people tend to feel the safety and security behind anonymised usernames and gamer tags, they are more inclined to cheat because they think no one will bat an eye for their choices or actions^[30].



Figure 6. Anonymous User

Another major contribution towards the motive for players cheating is FOMO. This means that players who know they don't have the time or motivation to grind for things such as battlepasses within games or certain timed events are more likely to cheat in order to chase their desire for limited timed rewards.

FOMO can also lead to negative feelings like anxiety and stress, people suffering under these conditions may not be able to make the right decisions and instead would be more inclined to take an easier way out by cheating and obtaining the desired items within the limited time. This can also lead to other players cheating due to peer pressure, seeing as their friends and acquaintances have received these items using cheats other players may also be inclined to partake through these methods, leading to a normalisation of cheating behaviour within the community^[31].

Some players feel justified to cheat simply because they deem some mechanics or the whole game itself as unfair. These players believe that they have been wronged by the game

itself and cheat due to frustration and anger towards the game rather than the people within the community. Game mechanics have been known to even trip up the likes of verified game journalists, so for an average player, to feel frustrated over a mechanic or bad game design can lead to them feeling a necessity to cheat^[32].

Games that have a higher skill ceiling, even in single-player, tend to force those frustrated by their lack of skill to cheat in order to get past a level or finish the game. Soulslike games and those from game developers *FromSoftware* tend to be the most challenging games. *Elden Ring* is one of such games that requires a lot of player skill, however, there are many cheats and mods out there for a game like this, some giving players to essentially turn on God Mode or OHK.

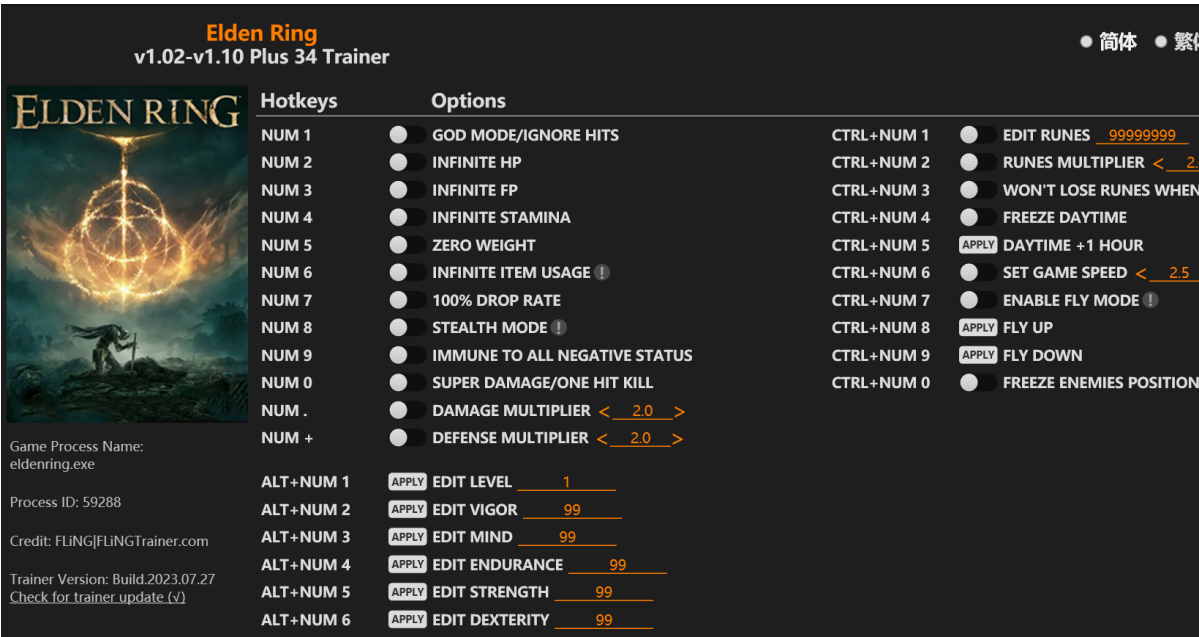


Figure 7. Elden Ring Game Trainer

Cheats like this essentially trivialise the game and let players play at their own pace and skill level, however, it gets rid of the entire point of the game where the difficulty and challenge is necessary in order for players to learn, try, succeed and progress their own personal growth. Soulslike games are known to be difficult within the gaming community and *Elden Ring* has

some of the most challenging enemies and bosses. From a games design perspective, this challenge is essential to maintain a sense of accomplishment once a player beats a boss or enemy they were stuck on for hours or days. Cheats like this get rid of any and all difficulty and make the point of the challenging mechanics irrelevant^[33].

Some players tend to cheat simply because they revel in the idea of making life difficult for those on the opposing team. There are people out there who genuinely just find it fun to cheat and think that because there aren't any real world consequences to their actions within an online video game, they are free to do as they like even if it includes ruining the experience for other players. These players tend to let their emotions get the best of them and usually turn on their cheats after a debilitating loss with the idea of if they can't have fun, no one else can either. Those in this group are the most malicious variant of video game cheaters, as they enjoy the disruption and chaos they bring to matches and enjoy watching the enemy team struggle and complain. They tend to find gratification in the form of not only winning but making sure everyone on the enemy team knows that they have well and truly lost^[34].

2.7 Cheating. A Deeper Dive:

It appears that every player has their own definition of what constitutes cheating in a specific video game. Many people in the online gaming communities are confused by the differing definitions leading to the majority of ethical ambiguity surrounding the topic. Cheats in video games originated from playtesting purposes for the game developers, nowadays, those same cheats and more, are activated within the game through the use of third-party software and/or hardware. Some people believe that exploiting game mechanics and bugs within a game also fall under cheating. No matter the definition of cheating, in its most basic form, it is a violation of rules and boundaries set in place.

Rules establish order in a game world and the game's internal dynamics. Disturbing these rules can bring chaos and destruction. John Huizinga in his book *Homo Ludens* said *"Inside the play-ground an absolute and peculiar order reigns. Here we come across another, very positive feature of play: it creates order, is order. Into an imperfect world and into the confusion of life it brings a temporary, a limited perfection. Play demands order absolute and supreme. The least deviation from it "spoils the game", robs it of its character and makes it worthless"*^[35, p. 10].

In video games, there are two very important categories in relation to cheating, those being "Hard Cheats" and "Soft Cheats". Hard cheats are actions or modifications made to video games that significantly alter the game's mechanics or provide substantial advantages in a manner that clearly violates the rules set in place for the intended gameplay. Utilising third-party programs, hacks or exploits, these cheats give malicious users an unfair competitive advantage in multiplayer settings. Wallhacks and aimbot fall under this category, where the former lets users see through solid objects and walls, hence the name, and the latter, allowing players to guarantee perfect accuracy without requiring skill. Triggerbots allow users to fire their weapon automatically once the crosshair is pointed directly at an opponent. External software tools like this give malicious players a significant competitive advantage over other players by knowing where the opponents are and securing a kill on said players.



Figure 8. CS:GO Vanity Triggerbot Settings

Soft cheats are less severe manipulations that may not directly violate the game's rules but still provide the player with a slight advantage or convenience. These cheats are often less obvious, may be considered as less harmful and may be harder to spot. Instead of using third-party programs, these cheats often involve in-game exploits or a creative application of game mechanics. Utilising a known game flaw or glitch to gain unintended advantages, such as duplicating items or bypassing difficult sections of a level by going out of the known internal game boundaries is known as bug exploitation, though out of bounds is a very controversial topic on its own^[36]. In other games like *Skyrim*, *Baldur's Gate* or any of the *Witcher* games, save scumming can be something that can be seen as a soft cheat. Save scumming is the practice of saving a game before making a crucial action or decision, then reloading the save file repeatedly to achieve the best possible results. This is typical in most single-player games that rely on heavy RNG or have random outcome mechanics. This is not as applicable to multiplayer games as save

files are usually server-side and not client-side, i.e. the save is on the games servers and not a user's local computer^[37].

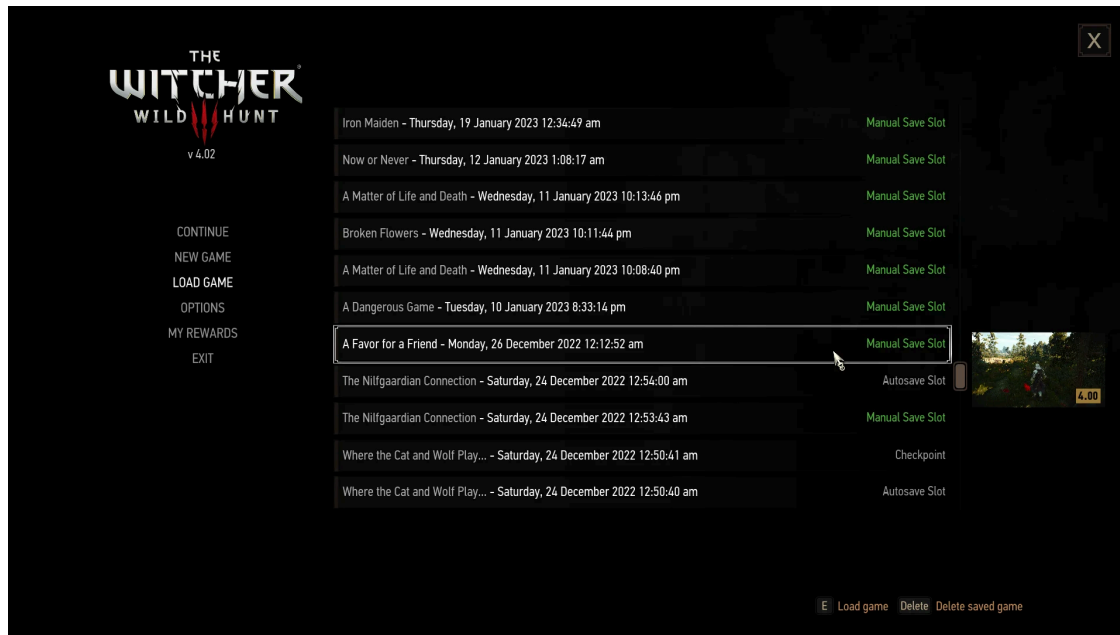


Figure 9. The Witcher III Save Menu

Another controversial soft cheat is meta gaming, the practice of gaining an advantage by utilising knowledge outside of what is intended to be available within the game world such as following game guides or advanced tutorials that exploit the game's mechanics. This can be something as easily done as following a *YouTube* tutorial or reading up an article explaining what to do online. Lastly, using the game's own rules in unconventional ways to gain advantages such as stacking buffs to take advantage of synergies between different interactions is considered soft cheating. This can be done in a lot of games, but *Destiny 2* is one of the more popular examples. Players can seemingly stack multiple armour mods to give them super energy like dodging near enemies to gain super energy, some players take this to the next level by incorporating fragments from their subclasses to increase this effect or exotic armour like *Radiant Dance Machines* which

allows players to dodge multiple times when near enemies, thus letting them dodge around 8 times in succession to fill up their super bar^[38].



Figure 10. Radiant Dance Machines Destiny 2 Build Guide

Both hard and soft cheats can have an effect on the game's integrity and the overall player experience. Soft cheats may occasionally blur the lines between a clever use of game mechanics and unfair advantage, whereas hard cheats are generally regarded as more egregious and are likely to result in more severe punishments such as bans or account restrictions^[39].

2.8 Cheating and its Impact on Player Mental Health

The effects of cheating on players' mental health have been the subject of a few studies, however, the research in this area is limited. According to a study that was published in the journal *Frontiers in Psychology*, cheating in online games can have negative effects on mental health, including increased levels of stress and anxiety^[40]. This is one of the most detrimental aspects of cheating as it affects those who are frustrated due to competition pressure and the overall inherent need to win in games. This high level of competitive motivation may reduce

psychological rejection of cheating and lead to an excessive expectation of rewards and an obsession with victory.

Cheating in single-player games can have positive emotional and psychological effects on players, including increased enjoyment and contentment, according to a *ResearchGate* study^[41]. The reasoning for this is quite simple, as mentioned before, in games like *Elden Ring*, where a player wants to explore the game without feeling as challenged or restricted due to the game's high skill ceiling, cheating to lower the difficulty allows players who may not have much experience with games within that genre to achieve their ultimate goal of finishing the game. The contentment of being able to play at your own pace and skill level is something that would be joyous for any player, cheating in this scenario would be extremely beneficial for those who do not have the motivation, time or skills and experience. In this setting, cheating has the potential to reduce stress, improve mood, and satisfy psychological needs. Some people are more likely to cheat in games that aren't perfect for them, just as a reader might lose interest in a book if they have to read every chapter before moving on. Additionally, some players may be more likely to do this if the information they require isn't included in the game and they would rather choose a more convenient option^[42].

A study published in *SecureCheats* found that cheating in online games can cause people to lose self-awareness, feel a diminished sense of personal responsibility, and have less inhibitions^[43]. The anonymity of participating in online video games behind social media usernames and gamertags can lead to an individual's deindividuation. This can then lead to individuals feeling powerful behind a false sense of security and be more inclined to participate in griefing, online trolling or even cheating further in games. This usually happens when individuals are participating together in a group setting and as mob mentality develops, an

individual begins to view their actions as less of their own but instead more aligned with that of the group's collective identity. An online example of this can be seen within the "Arcweb" and "Feral" clans in *Destiny 2*. The groups consist of a majority of people who cheat across multiple competitive settings. Those who want to join their clans may find that cheating is a more effective way to gain approval from existing members. This then creates an extremely toxic environment where players are essentially competing to be the most disruptive players. An issue with the mob mentality of these groups is that they bring chaos to the competitive scene of the game and violate rules set in place, thus making some players known notoriously within the community as cheaters^[44]. In conclusion, there is little research on how cheating affects players' mental health. More research is needed to fully comprehend the psychological effects of cheating in video games.

2.9 Community Responses to Cheaters

Depending on the severity of the cheating and the personality of the individual player, video game cheaters can react in a variety of ways to their experience. If the cheating was severe or affected the game's outcome, some players may blame the cheater for ruining their experience. Though this kind of response isn't limited only towards players who cheat, players who are bad at the game or trolling may be subject to a response like this too^[45]. Legitimate players can become irritated and frustrated when they come into contact with cheaters, which can have an impact not only on their mental health but also on their gaming experience as a whole^[46]. Some of these players may resort to cheating themselves or targeting the cheater in subsequent games as a means of retaliation against the cheater. Though not uncommon, other players may attempt to convince the cheater to stop cheating or express their frustration by directly confronting the cheater^[47].

2.10 Situations Where Cheating Matters

Initially, game developers used hacks and cheats as a means of debugging and testing, and this still holds true today. It would take a lot of time and resources to make a game where testing would have to be done through manual means. To go through each level and explore every interaction would be extremely infuriating and repetitive, when the developers could just use a cheat that they, themselves, have created. Involving cheats or hacks in single-player games is by and large viewed as acceptable, as it doesn't affect other players' gaming experience. Games like *Grand Theft Auto* series, *The Sims* franchise, *Minecraft*, *Fallout*, and *The Elder Scrolls* games have built-in cheat systems and/or cheat codes that allow players to manipulate the gameplay, characters, and the world in various ways.



Figure 11. Developer Console in the Sims 4

Another instance where cheating actually seems to have a place is modding or creating custom lobbies within games, this is the case with many co-operative multiplayer games such as *Lethal Company*, *Risk of Rain 2*, and *Content Warning* where game developers themselves have

endorsed using modded clients^[48]. Playing on modded custom games can make the games feel repressed, the author has over 8,000 hours on RoR2 and replayability seems endless as modders who are invested in the game love bringing new and exciting changes every day. Of course this does change over the course of a games lifespan and it may die down but mods and custom lobbies provide a great deal of enjoyment, especially those mods that increase the player count across all the aforementioned games. These mods work by allowing users to play with a large group of friends and still have the ability to scale difficulty accordingly, thus, not sacrificing difficulty in order to play with more friends.

There are some games where cheating and/or hacking seem to be the main focus or rather a plot point. *Watch Dogs*, *Cyberpunk 2077*, *Observer*, and *Quadrilateral Cowboy* are some of many games where the player must use a variety of hacking strategies to complete missions and advance in the game.

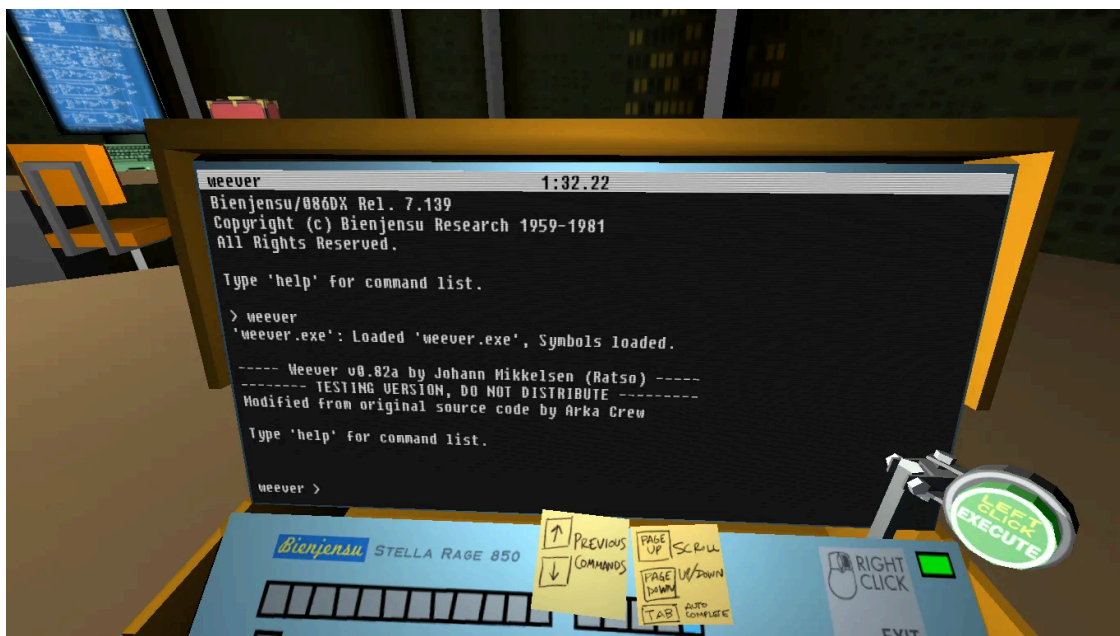


Figure 12. *Quadrilateral Cowboy*

Deus Ex is another game where players can hack into restricted areas and complete objectives using a variety of methods^[49]. In *Saints Row IV*, players can use the in-game cheats to gain superpowers essentially making every mission in the game a cake walk. *Borderlands 2* is a game with a wide variation on RNG outcomes and loot drop rates, some players abuse exploits and glitches found within the game to gain higher levelled weapons and items^[50].



Figure 13. *Borderlands 2 XP Glitch Video*

In multiplayer games that have competitive settings, the notion of using hacks or cheating is generally considered immoral as it violates the principles of fair play. Cheating is not only wrong, but it is also against the law in many games that use in-game purchases because cheating in these games would let players access content for which they have not paid. Hacking on the other hand, involves gaining unauthorised access to computer systems, breaching security more often than not goes against the Code of Conduct for the majority of games. Violations like this can result in severe legal consequences outside of the online space^[51].

2.11 Cheating and Disabilities

There are conflicting opinions thrown around the gaming community about whether aimbots can help players who have disabilities. Some players argue that aimbots can help level the playing field for players with disabilities, allowing them to compete on an equal footing with other players. However, others argue that aimbots can be unfair to other players and undermine the ethical values of competition and fair play. External hardware tools used by some disabled players, like *XIM* which allows players to play on a MnK setup whilst fully retaining the benefit of aim assist (although in some games, the same benefit can be applied by simply plugging in a controller and just using MnK) and *Cronus* which lets players use scripts that modify recoil, aim assist, firing speed, sprinting and various other game mechanics are also seen as hard cheats within the community^[52].

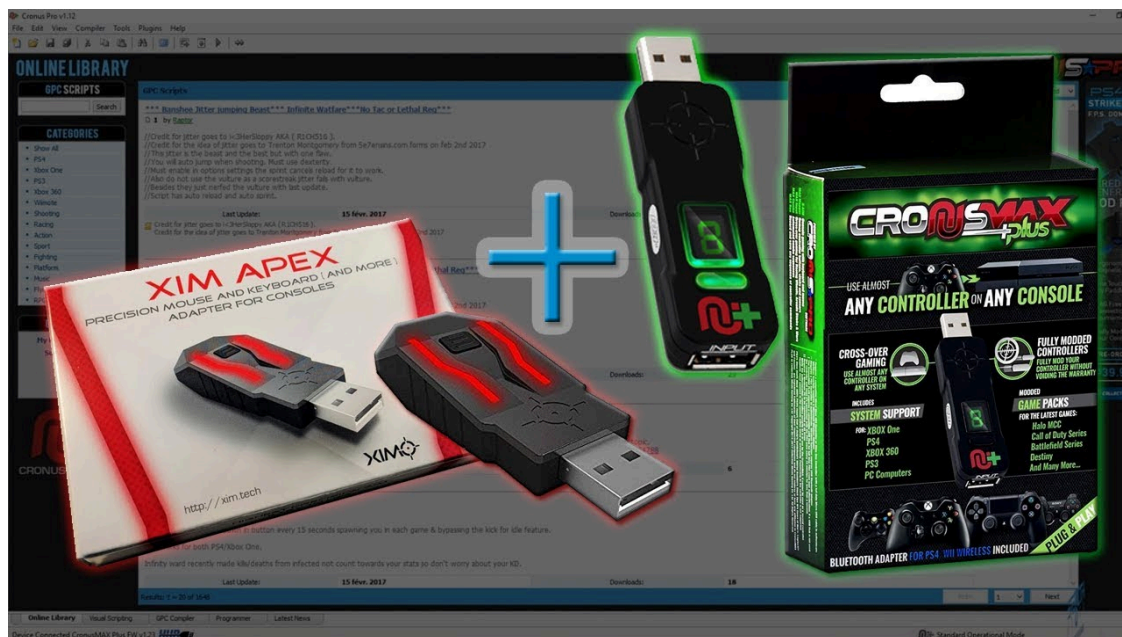


Figure 14. XIM and Cronus Hardware Accessibility Tools

This however, has not stopped players with disabilities from using them, “*I shouldn’t be punished because of a physical hindrance*^[53]” said one Reddit user. Whilst this statement may be

true, there is no form of verification, and there won't be any as it would not be ethical to show that a disabled player is behind any of these cheats. People can lie and pretend just to gain an advantage over other players to compensate for their lack of skill or in-game experience.

Modified controllers on the other hand, are seen as an acceptable method of input for disabled players. Rarely anyone bats an eye over them because they don't enhance a player's abilities in any way shape or form, they simply allow players to remap controls to what they find comfortable and allow the game to be more accessible to them.

2.12 Anti-Cheat Hardware

It is theoretically possible to stop players from cheating or hacking by using an eye tracker on a PC, but this method may not be 100% effective. The benefits of using eye trackers to stop cheating include the fact that eye trackers are able to detect abnormal eye movements, which could indicate the use of aimbots or other cheats, combining this with other anti-cheating measures can boost their effectiveness^[54]. Although on the complete opposite side of the spectrum, something like this may not work for players that have certain ocular disabilities. The fairness and nondiscrimination of anti-cheat measures must be ensured by game developers. Eye tracking can be used to watch how players act and patterns that could be signs of cheating can be detected^[55].

However, there are some severe issues with using eye trackers, there is a possibility that players will eventually become accustomed to eye tracking, making it less effective. It's also possible that eye tracking won't be able to catch all kinds of cheating, like triggerbots or wallhacks. Furthermore, hardware with such extensive technology may be costly and challenging to implement on a large scale^[56]. Additionally, large-scale eye tracking would necessitate a significant investment in resources and infrastructure, including the capacity to store and process

data and trained personnel to monitor and analyse the data, the idea of combating cheating may not be a substantial enough justification for spending resources like this. Concerns about data security and privacy can also arise when sensitive information about a player's eye movements is collected through eye tracking. Players' personal information must be protected by game developers, and they must be clear about how data is collected and used. If players do not wish to participate, they should be able to turn off eye tracking, without any discrimination or judgement from other players or game developers.



Figure 15. Tobii Eye Tracker 5

Chapter 3: Methodology

This study aims to identify the psychological, social, and ethical factors that encourage players to cheat in video games, as well as the significant negative effects that cheating has on individual players' experiences and the gaming community as a whole. It also aims to investigate potential solutions to this problem. Phenomenology is chosen as the primary philosophy for this project as it relies on subjective knowledge.

Interviews and qualitative data would have shed light on the perspectives of online gaming communities regarding cheating. However, the qualitative data, trends, and scripts would require a significant amount of time to analyse for the intended 50-100 participant sample, which was beyond the scope of the current project. As a result, it is decided that a questionnaire along with some interviews would be a better way to quickly gather the necessary information from the participants.

As part of the demonstration for the final project, a cheating experiment will be carried out, where the participants can be observed in a real world setting. This only exists to hypothesise that the rapid scale of difficulty can force a player to cheat in a video game.

A Gantt chart is the preferred project management tool as it provides a visual representation of the timeline and tasks within the project. This is valuable for planning since it allows the author to effectively see the beginning and end dates of tasks, recognise dependencies, allocate resources, and monitor progress towards project milestones. An example of what has been used as a basis of this study can be found below.

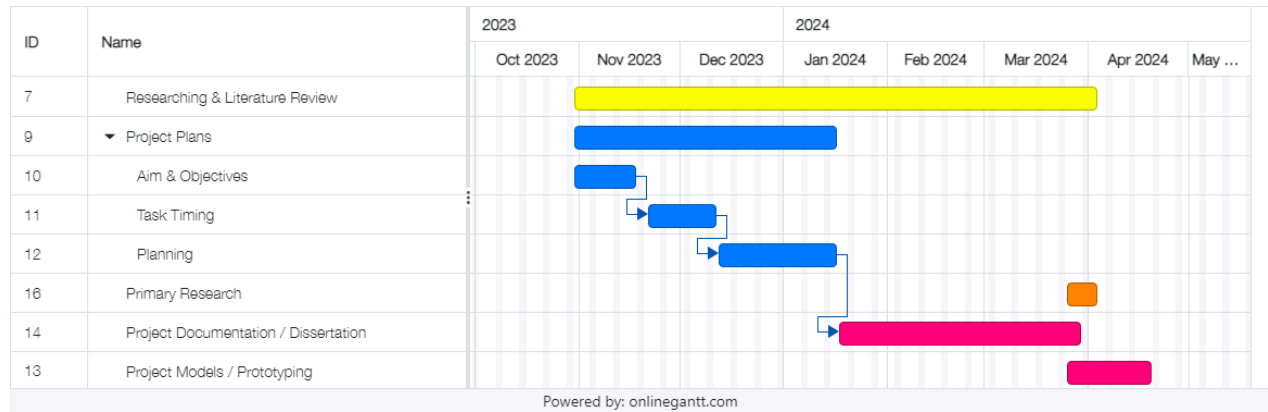


Figure 16. Proposed Gantt Chart for This Study

Chapter 4: Analysis of Results

4.1 Results and Observations

4.1.1 Results

The questionnaire is quite comprehensive as it contains a total of 51 questions, a copy of this document can be found in *Appendix A*. The number of total responses received were 77 which fall in the middle of the intended sample size; a copy of these results can be found in *Appendix B*. Having both of these attributed to the rich dataset for analysing the complex phenomenon of cheating in video games from various perspectives.

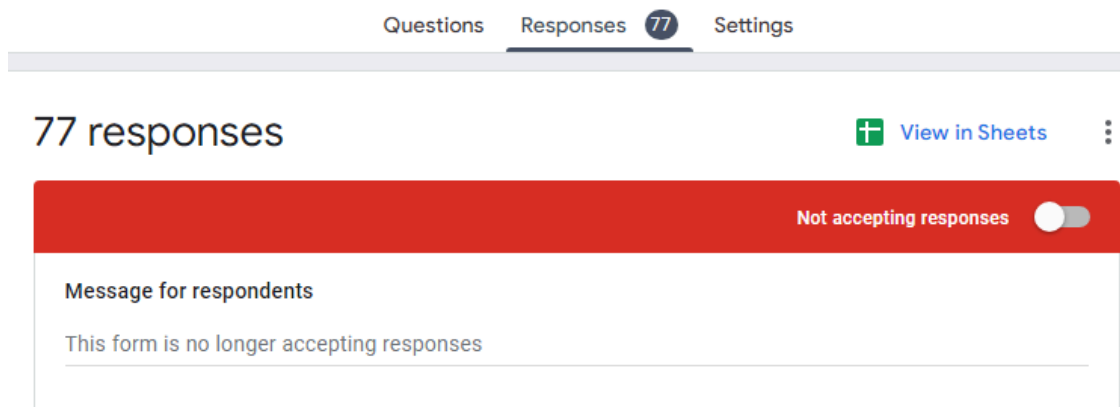


Figure 17. Number of Total Responses

4.1.2 Observations

The study has made a number of important observations about how players feel about cheating in video games. Players struggle to differentiate the acceptability of cheating as a whole because every individual has their own meaning behind what constitutes cheating. That being said, aesthetic mods are generally seen as a more acceptable form of cheating than gameplay-altering mods and hacks.

It is also observed that many players recognise that cheating can stunt personal growth and skill development by providing easy solutions to challenges. To address this issue, 72.7% of participants are urging game developers to implement more robust anti-cheat measures, severe penalties for cheating (such as hardware bans), and enhanced community management strategies in order to preserve the integrity of the gaming experience for all players.

Do you believe game developers should implement stricter measures to prevent cheating?

77 responses

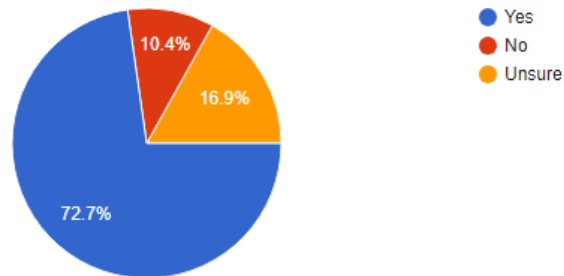


Figure 18. Implementing Stricter Anti-cheat

4.2 Key Trends

The results highlight a notable trend where 89.6% of players cheated in single-player game modes compared to multiplayer or competitive online environments.

Have you ever used cheats or mods in single-player games?

77 responses

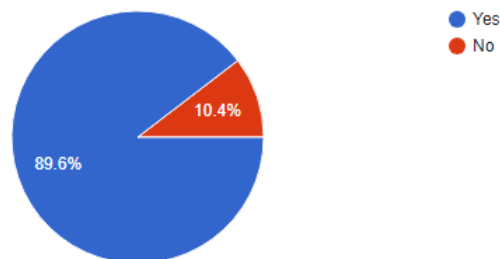


Figure 19. Cheating in Single-player

This suggests that players perceive cheating in single-player games as less harmful or unethical. Alongside that, the data shows that there are a variety of motivations to use cheats, the most common of which being the 46 participants with the desire to save time. Other reasons are to get past challenging sections of the game, experience different outcomes or increase one's level of personal enjoyment by gaining access to unique features or all of the gear.

Have you ever cheated in a game to save time? (Single or Multiplayer)
61 responses

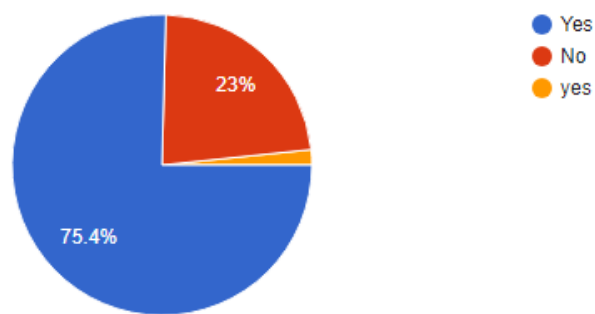


Figure 20. Cheating to Save Time

There also seem to be a significant amount of motivations for modding a game ranging from playing with more players than intended to entirely revamping the story content within a game. This suggests that many players do not consider modding as cheating as it only affects the players in a non-competitive environment.

4.3 Correlations and Common Data

4.3.1 Correlations

According to the data, players were more likely to cheat in single-player games compared to multiplayer games. 19.5% of participants reported having cheated in online multiplayer games, this suggests that cheating is more common in single-player games, which typically have fewer restrictions and consequences because cheating does not directly affect other players.

Have you ever used cheats in multiplayer online games?

77 responses

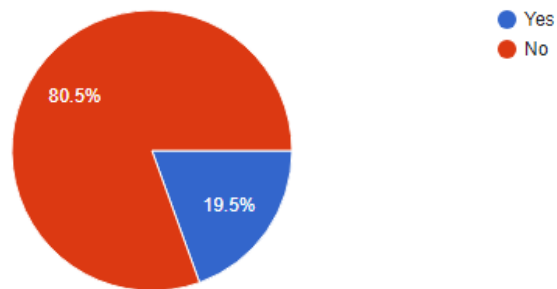


Figure 21. Cheating in Multiplayer

In contrast, 76.6% of participants viewed cheating more negatively in competitive or multiplayer games due to its direct impact on other players' experiences.

Do you believe that cheating in video games is acceptable?

77 responses

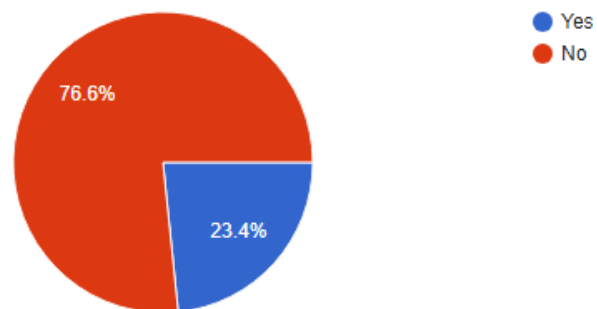


Figure 22. Acceptability of Cheating

This aligns with research indicating that cheating in online gaming communities can be socially contagious, however, the social dynamics of the community can also deter cheating because cheaters run the risk of losing friends and social standing within the community.

Encountering cheaters leads to high levels of frustration and a decreased desire to continue playing the affected game. *“Irritated because they're ruining mine and others' experience.”* said one participant.

Have you ever left a game due to the presence of a cheater?

77 responses

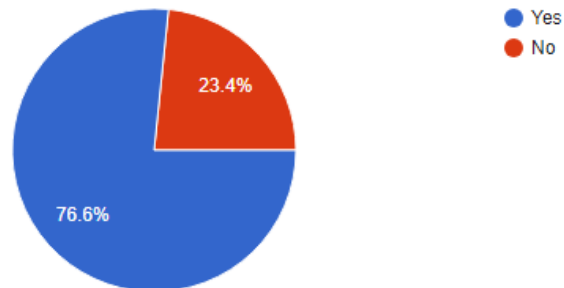


Figure 23. Leaving Games Due to Cheating

Players who experience cheating first-hand are more likely to report the cheaters, indicating a protective attitude towards maintaining fairness in the game, however, there is variance in whether players will immediately leave the game or stay until the end before reporting, depending on their personal integrity and the severity of the cheating.

How often do you encounter cheaters in your multiplayer gaming sessions?

77 responses

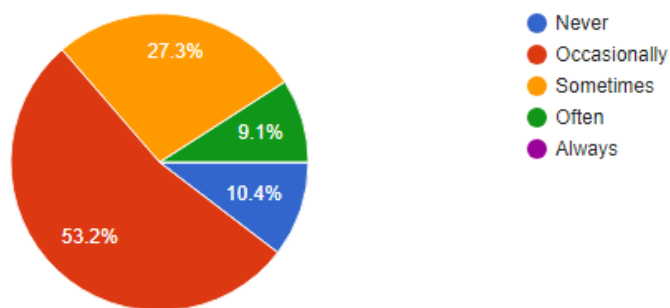


Figure 24. Encountering Cheaters in Multiplayer

Have you ever reported another player for cheating?

77 responses

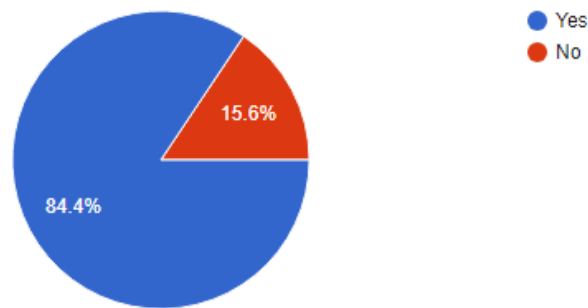


Figure 25. Reporting Cheaters in Multiplayer

4.3.2 Common Data

The questionnaire results reveal several common trends regarding the demographics and behaviours associated with cheating in video games. The majority of players believe that the demographic of younger players and those who engage in high-population, competitive game modes are more frequently involved in cheating activities as those in this category are driven by a stronger competitive spirit and a desire for rapid progression, leading them to seek out shortcuts through cheating.

Do you think that cheating in multiplayer games is more common in certain types of games or genres?

77 responses

Yes, especially shooters are prone to cheaters. MOBAs too.
High population games, pvp.
I believe fps and mmos games receive the most cheaters especially mmos
Yea
Yes, fps and fighting games I've seen
Yes, i'd say in multiplayer games (especially where you play against other players) have more cheaters then in other genres.
In competitive games like counter strike or overwatch, yes. In objective type games like helldivers, where you fight along side your teammates against the computer, I see it less commonly.
Yes more common in fps type games like Call of Duty

Figure 26. Cheating and Game Genres

Do you think that cheating in video games is more common among certain types of players or demographics?

77 responses

people who are young
It's mainly players that can't progress in skill
Hard to tell, but i'd say those with a "i must win"-mentality or those with "i can do whatever i want"-attitude might be the most common to cheat.
I think cheaters often come from real world environments where using everything outside the rules to get ahead is commonplace.
Usually the younger more impressionable gamers
Typically younger players but surprisingly common amongst older players too.
Yes. Pay-to-play players are more prone to using cheats/hacks.

Figure 27. Cheating and Demographics

Importantly, the data shows that encountering cheaters has a significant negative impact on the gaming experience for other players. This is characterised by feelings of annoyance, frustration, and a sense of injustice.

How do you feel when you encounter a cheater in a game?

77 responses

A little mad.
Most cheaters I encounter are cheating or exploiting at a gamebreaking/metabreaking level, which means the entire match is pointless and just turns into waiting for the score to max out so you can leave.
It ruins it because we know we've lost.
Frustrated
Like any energy you put in is worthless
Big sad
Because I mainly play fighting games it ruins the experience
frustrated in general. If there are an ally, see question below. If they're an enemy, makes you feel defeated most of the time, because the cheats they use most of time include some form of invincibility

Figure 28. Encountering Cheaters

The responses to encountering cheaters vary, with some players immediately reporting and quitting the game, while others may stay for a free win before reporting the

incident. This reflects a range of personal integrity levels and attitudes towards cheating among players.

Do you report cheaters to the game developers or administrators? Why or why not?

77 responses

I will if there is an easy option to do so. The easier, the more likely.
No, feel no need.
I let them know when I can, but usually it was just through in game means.
I report them using whatever in-game mechanic they have to report players. I do it because it seems like the right thing to do. But if the game does provide that easy one click report button and makes me go to their website to do it, I dont bother.
I do! If they have an option they try and take care of it. Cheaters just have a habit of making new accounts quickly so the game then becomes what can the developers do to discourage that.
Yes, in competitive games it will hopefully either inconvenience or remove a cheater from other players' matches.
Yes. If I don't want them on the enemy team then I shouldn't be okay with them being on my team.

Figure 29. Reporting Cheaters

Overall, the research highlights the complex interplay between player demographics, motivations, and the broader social impact of cheating within gaming communities. Understanding these dynamics is crucial for game developers and community managers to implement effective strategies to deter cheating and maintain a fair and enjoyable gaming environment for all.

Chapter 5: Evaluation of Project & Future Proposals

5.1 Challenges Faced when Analysing Large Datasets

The scope of this research project played a significant role in shaping the findings. Initially, the target was to gather responses from under 50 participants, however, the questionnaire received a higher response rate than anticipated, resulting in a more extensive dataset. While the larger dataset provided valuable insights, it also impacted the original project timeline, essentially meaning that the analysis of this comprehensive data proved to be time intensive, requiring the author to focus their efforts on thoroughly examining the questionnaire responses rather than conducting additional interviews.

Despite the challenges posed by the expanded scope, the author utilised tools like *Google Forms*, *Google Sheets* and *Claude AI* to efficiently analyse the data and extract meaningful insights. This allowed them to make informed decisions about prioritising the questionnaire findings over other data sources, ensuring the final results were grounded in a robust and representative sample.

Overall, the scope of this project evolved organically, presenting both opportunities and obstacles. The author's ability to adapt their methodology and focus on the most relevant data contributed to the depth and quality of the final outcomes.

5.2 Conclusion and Suggestions for Further Research

5.2.1 Conclusion

The responses provided valuable insights that complimented the existing literature on the psychological and social factors driving cheating behaviour in online gaming as it was found that a player's inclination to cheat can also be influenced by emotions,

self-esteem, and the competitive nature of the game, especially in single-player games where the consequences are less severe.

Do you think cheating in video games reflects a player's real-life behaviour and ethics?

77 responses

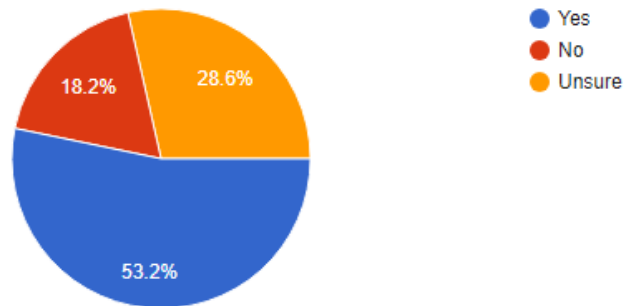


Figure 30. Cheating and Its Impact on Behaviour and Ethics

Do you believe cheating in video games can impact a player's mental health?

77 responses

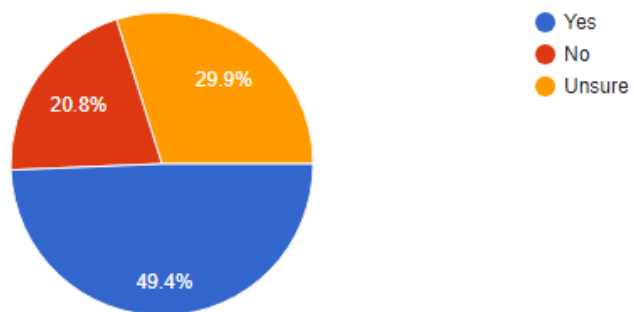


Figure 31. Cheating and Its Impact on Mental Health

Do you believe that cheating in video games can have a negative impact on your personal integrity?

76 responses

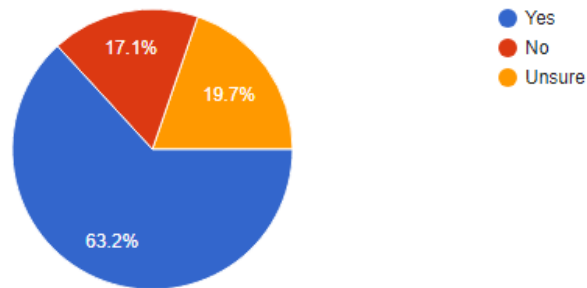


Figure 32. Cheating and Its Negative Impact on Personal Integrity

In general, the data collected suggests that cheating in video games is a complicated problem that has a variety of causes, effects, and responses from players and the gaming community as a whole.

5.2.2 Suggestions for Further Research

This study has uncovered valuable insights, but further exploration would provide a more comprehensive understanding of the motivations behind cheating in video games. Conducting interviews with both cheaters and non-cheaters, as well as surveys and studies on the prevalence and impact of cheating across different game genres and platforms, could yield additional insights.

Furthermore, a deeper examination of the various forms of cheating, including the use of peripherals, settings, and software, could uncover new perspectives. While the scope of this project is limited, there is significant potential for further research to build upon the findings and address this complex issue more holistically.

Chapter 6: Summary

This study aimed to provide a comprehensive understanding of the complex issue of cheating in video games through an analysis of player experiences, motivations, and the impacts on individuals and gaming communities, the research explored the ethical, psychological, and social implications of cheating. The study identified reasons for cheating, examined its effects on mental health and player relationships, and evaluated potential solutions to address this challenge. The findings offered valuable insights to inform future scholars, game developers, and the gaming community as a whole in fostering a more ethical and enjoyable gaming experience.

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Fig 17. onwards - All sourced from the questionnaire results found in *Appendix B*.

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Appendices

Appendix A: Example of Questionnaire

A copy of the exact questionnaire used for this study can be found by either clicking [here](#) or at

https://docs.google.com/forms/d/1XuiuefTZo1cbce9ee2INEEPveT_Ot7n2FoYY051bR6o/edit?usp=sharing. As this was made using *Google Forms*, a “view only” setting does not exist as forms are normally sent out for responses and sharing is for adding collaborators. In order to give a complete example of the questionnaire used, the link above is a collaborator link, allowing users to edit and share it alongside with the ability to make further copies.

Appendix B: Sample Group Response

A copy of the exact responses received from participants of the questionnaire can be found by either clicking [here](#) or at

<https://docs.google.com/spreadsheets/d/15feLDs2VYPvCSnk8cpEcE56IjnCegnoY433m4nD3pwo/edit?usp=sharing>. This link allows anyone with the link to only view the results.