Exploring the Relationship Between Game Mechanics and Ethical Play: A Study of *Pandemic* and *Papers, Please*

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Abstract

As video games continue to hold an increasingly prominent role in society, this thesis delves into the crucial dynamics between game mechanics and ethical play, focusing on two highly engaging digital games: "*Pandemic*" and "*Papers, Please*." Given their distinctive use of narrative elements, reward systems, and ethical dilemmas, these games provide a fertile ground for exploring how various gameplay facets shape a player's ethical decisions and emotional engagements. Utilizing a detailed analysis of these games and a comprehensive exploration of player interactions, this research aims to underscore the pivotal role of game mechanics in driving empathy, ethical contemplation, and decision-making among players. It further unravels the ways reward systems can steer players towards or away from ethical choices, shaping their unique ethical journeys. By illuminating the potential of games as formidable instruments for ethical education and introspection, this study suggests the value of considering these implications in game design. Consequently, this thesis enhances our understanding of ethical play within the ever-diversifying world of video games, thereby contributing to the broader discourse around the societal impacts of gaming.

Key words: Game Mechanics; Ethical Gameplay; Game Ethics.

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Contents

1. Introduction

1.1. Background and Research Motivation

Games have evolved over the years from simple, objective-driven experiences to complex narratives filled with choices and consequences, and this evolution has created a unique platform for ethical play. Ethical play within games revolves around decision-making processes that reflect moral values, presenting players with situations where they must balance in-game objectives with ethical considerations. This process doesn't just enhance player immersion; it also holds the potential to shape players' ethical perspectives outside of the game.

In the contemporary gaming landscape, ethical play holds a central role, often serving as a critical component of the gameplay experience. Games, ranging from immersive story-driven experiences to multiplayer online platforms, often present players with ethical quandaries. These moral challenges carry substantial weight, potentially altering the trajectory of the gameplay. This aspect of gaming enables players to examine their ethical values in a virtual context, letting them confront the outcomes of their choices devoid of real-world repercussions. This, in turn, encourages players to engage in critical reflection about their decisions, thus fostering ethical thinking. Two distinctive examples of this phenomenon can be observed in the games "*Papers, Please*" (Pope, 2013) and "*Pandemic*," (Leacock,

2008), both of which intricately weave ethical dilemmas within their game mechanics.

The intricate relationship between ethical play and game mechanics is what drives this engagement. Game mechanics - the fundamental rules and systems that govern how a game is played - dictate the opportunities and constraints for ethical play within a game. They shape the possibilities for player actions, determine the consequences of those actions, and create the narrative context that imbues those actions with moral significance.

For instance, "*Papers, Please*" presents a narrative mechanic where players make choices affecting the game's trajectory, creating a rich environment for ethical play. On the other hand, "*Pandemic*" explores ethical play within a cooperative, reward-based mechanic, offering a contrasting perspective. These examples highlight how game mechanics can translate player choices into narrative outcomes, reinforcing the connection between actions and their ethical consequences.

Ultimately, the connection between game mechanics and ethical play is an essential component of modern video game design. It is the interaction of these two elements that enables video games to serve as a platform for exploring ethical concepts, thereby contributing to players' ethical growth. Therefore, an in-depth study exploring this connection, taking "*Papers, Please*" and "*Pandemic*" as primary subjects, is not just relevant but essential in the context of our increasingly digitized society, where games are a prevalent form of entertainment and a significant cultural influence.

With a comprehensive understanding of the role of game mechanics in guiding ethical play, we can potentially enhance the ethical engagement of games, contribute to the positive societal impact of gaming, and shape the future of game design.

1.2. Research questions and objectives

Building upon the background, this research endeavors to delve deeper into the relationship between game mechanics and ethical play. The primary research question that guides this study is: " How do game mechanics influence the potential for ethical play in games? and how do game mechanics produce particular player experiences that promote ethical play? " This overarching question breaks down into several sub-questions:

- **How are ethical dilemmas presented and handled within the game mechanics of "*Papers, Please*" and "*Pandemic*"?**

This question is crucial as it seeks to understand the structural elements within these games that pose ethical dilemmas to players. Understanding the design and context of these dilemmas would provide insight into how the games prompt players to make ethical decisions, thereby setting the foundation for the subsequent research questions.

- **How do players respond to these ethical dilemmas, and how do these dilemmas influence player behavior within the game?**

This question is chosen to delve into the players' reactions to the ethical challenges presented by the games. The goal is to understand how these reactions reflect on their ethical decision-making process and how it impacts their overall gameplay. It also allows us to comprehend the real-life implications of these in-game ethical decisions, such as exploring gender dynamics and potential educational applications.

- **How do the mechanics of the games "*Pandemic*" and "*Papers, Please*" contribute to the ethical engagement of players?**

- **In what ways does the cooperative nature of "*Pandemic*" lead players to make decisions for the greater good rather than individual benefit?**

The selection of these two questions is motivated by the intention to delve into the distinct mechanics that facilitate ethical engagement in the games "*Pandemic*" and "*Papers, Please*." By investigating how game mechanics contribute to ethical play, the analysis aims to reveal the underlying design principles that guide players' moral decisions.

The first question allows us to contrast the various mechanisms within both games that subtly guide ethical decision-making, such as shared responsibility in "*Pandemic*" and narrative-driven quandaries in "*Papers, Please*." The second question focuses specifically on "*Pandemic*," providing an opportunity to explore how its cooperative nature shapes player choices for communal benefit.

Together, these questions foster a rich understanding of how game design can be utilized to provoke thoughtful ethical deliberations, reflecting different aspects of human moral thinking and cooperative behavior. By choosing these specific inquiries, the analysis aligns with the broader discourse on the social and cultural impact of gaming and its potential to serve as a medium for ethical education and reflection.

The aim of this research is to answer these questions through a detailed examination of "*Papers, Please*" and "*Pandemic,*" two games known for their robust ethical gameplay. This will involve an analysis of the games' mechanics, a study of player decisions and their ethical implications, as well as a review of player feedback to understand the perceived effectiveness of these mechanics in shaping ethical play.

The research, therefore, hopes to add depth to the academic discussions surrounding the ethics of video games, emphasizing the pivotal role of game mechanics in fostering ethical play. Through this, the study aims to provide valuable insights to game developers and educators, as well as the wider audience, on how games can be designed to promote ethical decision-making and behavior among players.

2. Literature review

In my examination of ethics within the context of gaming, I draw upon established theoretical frameworks to explore the unity and interplay of moral choices, their consequences, and the underlying structures that shape them, specifically game mechanics. Unlike some previous studies that may have focused solely on the ethical dilemmas presented in games, I also consider how game mechanics influence player choices and ethical reasoning. By aligning my approach with existing theories on ethics and gaming, such as the Mechanics-Dynamics-Aesthetics (MDA) (Hunicke et al. 2004) framework, I aim to provide a comprehensive analysis that situates my research within a broader scholarly conversation on the ethical dimensions of player choice. Game mechanics are foundational in crafting the ethical fabric of a game world, as they establish the rules and boundaries within which players operate. They frame the moral dilemmas players encounter and the potential outcomes that their decisions could yield. The analysis primarily focuses on '*Pandemic*' and '*Papers, Please*' as illustrative examples. '*Pandemic*' provokes ethical dilemmas about resource allocation through cooperative gameplay mechanics. Conversely, '*Papers, Please*' uses mechanics to incite players' moral reflections, influencing decisions around empathy and regulatory adherence. These instances highlight how game mechanics shape ethical play and enrich game experiences.

2.1. Game mechanics

Game mechanics, as defined within the Mechanics-Dynamics-Aesthetics (MDA) (Hunicke, R., LeBlanc, M., & Zubek, R. 2004) framework, are the specific components of a game that outline its rules and structure. They are the fundamental elements that enable and constrain interactions within the game's environment, serving as the basis for player engagement and exploration. These mechanics can range from simple actions, such as movement or item collection, to more complex systems like skill trees or moral decision-making pathways. They interact dynamically with player inputs to create various gameplay experiences and outcomes. The influence of game mechanics on a player's behavior, choices, and emotional responses is a complex phenomenon that merits careful examination. Game mechanics can be structured to present moral dilemmas, potentially provoking ethical reflection in players and influencing their decisions. This can contribute to a richer, more immersive gaming experience. However, the claim that the particular design of game mechanics can strongly impact behavior needs to be understood within a broader research context, and further studies may be needed to substantiate this relationship, as the connection is not explicitly made in the foundational MDA framework paper.

In games, one widely implemented mechanic is the reward system. This system serves as an incentive, motivating players to sustain gameplay and continue their virtual journey. Rewards, which may be points, in-game currency, or unlocked content, serve to recognize player progress and sustain their interest in the game

(Masuda de Haan, 2015). Another popular game mechanic is the challenge system. Challenges, including a series of tasks that players are required to complete for game progression, can range from puzzles and timed missions to climactic battles, adding depth and appeal to the gameplay.

Games are played within a fixed time and space, adhering to a set of rules that are freely accepted by players but have a binding force as long as players are 'in' the game. This concept aligns with Huizinga's "magic circle" theory, where the game takes place in a separate realm with its own rules (Huizinga, 1938), and resonates with Juul's definition of a game, emphasizing the importance of rules and the voluntary participation of players (Juul, 2003). Individuals can see the tension between freedom and limitations in games, which is inherently consistent with moral life that involves the cultivation of ethical sensibilities. Furthermore, considering Arnseth et al. (2018), game mechanics can involve story and narrative elements to further immerse players in the game world. This may involve choosing between different dialogue options to advance the story, which may have an impact on the outcome of the game. Such game mechanics aim to create an engaging and dynamic gaming experience for players.

Developers can combine different mechanics to craft a unique and enjoyable game that keeps players engaged (Szolin et al., 2022, p. 5). Developers often draw inspiration from moral dilemmas in real life, resulting in the design of multiple branching paths within games. Moreover, they hope that these games can convey

their worldview. The ethical dimensions present within games and their correlations to real-world ethical issues constitute a significant and pressing matter.

The social dynamics within games are not merely confined to virtual worlds; they interact and intertwine with real-life experiences, creating a complex fusion that influences both virtual identities and real-world selves. The behaviors, choices, and moral decisions that players make within games can echo in their daily lives, subtly shaping their ethical frameworks and social interactions. While game mechanics such as rules, structure, and virtual environments play a critical role in designing immersive experiences (Arabi, 2021, p. 8), it's the social dynamics within the games that breathe life into them. These dynamics foster collaboration, competition, empathy, and ethical reflection, allowing players to explore various facets of human interaction within a controlled environment.

In traditional tabletop games like chess, social dynamics have been pivotal in the evolution of the game's mechanics. The rise of video games has further expanded the complexity and variety of social interactions, employing advanced technology like artificial intelligence and virtual reality. However, the core principle remains the same: games serve as a microcosm of societal interactions, reflecting and influencing how players navigate both virtual and real-world ethical dilemmas. This complex interplay underscores the need for ongoing research and ethical considerations in the development and distribution of games, recognizing their potential impact on social behavior and cultural norms.

The gaming industry has made significant progress in various aspects, including technology, storytelling, and user engagement. This advancement has incited endeavors to imbue platforms with cultural and ethical values, reflecting a growing recognition of the potential for games to influence social norms and individual behavior. Recognizing the power of games to shape player choices and perceptions, developers are increasingly integrating ethical principles, such as promoting fair play, into game design. This integration is instrumental in fostering a healthy, competitive environment that attracts a broader player base. It contributes not only to the industry's sustainable evolution but also enhances games' global cultural significance. As the underlying structures that shape player interaction, game mechanics—such as rules, challenges, and reward systems—are vital to this process. The effective use of these mechanics in conveying ethical values ensures immersive experiences that inform player behaviors, as emphasized by De Cremer and Moore (2020, p. 19) and further highlighted by Garret and Young (2019).

In the realm of game design, a crucial assortment of mechanisms serves as the blueprint for player behavior, instrumental in formulating a gratifying gaming journey. Key mechanics such as player maneuverability, the management of resources, and combat dynamics profoundly shape player engagement with the game. Supplementing these fundamental mechanics are factors like narrative architecture, social interaction, and emotional involvement, which add layers of depth and complexity to the gaming experience (Liu et al., 2020, p. 20). It is essential to critically examine single-player games that portray violence, explicit content, or

unethical behavior without providing a contextual framework or guiding principles

for understanding these elements. Such games may inadvertently establish a

harmful precedent for other cultural media if not examined through an ethical lens.

Given their solitary nature, the pertinence of morality in these games may seem less

pronounced due to the lack of a social context for its application. In contrast,

multiplayer online games present a different scenario compared to single-player

games. The interactive aspect between players means that any unethical conduct

within the game might lead to mental distress, even trauma, for other participants.

Hence, the introduction of appraisal systems such as reputation, credit, and skill

ratings are requisite in these games for ethical considerations. By employing these

systems, multiplayer games can diminish their potential to evolve into harmful

cultural influences, thereby aiding in the formation of ethical in-game societies.

Games provide players with a range of emotions from anger to happiness,

and such emotions distinguish gameplay experience from daily life (A. Sparrow et al.,

2021, p. 13). Because of games' ability to express thoughts and emotions together,

each game has a unique spirit. In Chinese, the term "精神" (jīngshén) is utilized to

refer to an individual's mental or spiritual facets, embodying characteristics like

vigor, vitality, enthusiasm, and determination. In essence, "精神" encapsulates the

dynamic mental energy and resilient spirit that drives a person's actions and

attitudes. Yet, this unique spirit lies dormant until players engage with the game. The

spirit is fully realized only when players bring their imagination, strategy, and

emotional investment to the gameplay, igniting the game's potential and

augmenting the immersive experience. Single-player games, despite seemingly solitary experiences, establish a social interaction between game developers and players. This interaction unfolds through the gaming medium, underlining the fact that even in the absence of direct player-to-player contact, a social dialogue is inherently present. This is consistent with the concept of "精神" (jīngshén), in that the player engages with the game, driven by their inner vigor, vitality, enthusiasm, and determination, thereby responding to the challenges and narratives set by the game developers (Larson, 2020, p.12). In the real world, most people's interactions are based on symbols such as language, sound, and images. Therefore, novels, movies, anime, and games, as cultural forms, also require symbols as a foundation. This aspect is critical as the examination of ethics within games necessitates researchers to recognize both the singularity of the gaming experience (that is, how it differentiates from 'typical' life) and the ties to 'typical' life through universally understood symbols. This interpretation of game mechanics invites a nuanced understanding of how games transcend the boundary of simple entertainment, becoming vehicles for imparting valuable lessons and invoking thoughtful introspection. The spirit of "精神" (jīngshén) breathed into games by developers is awakened by the active engagement of players, underscoring the significance of the player-game interaction as a conduit for symbolic exchange. Thus, game mechanics, serving as the medium of this exchange, can influence players' emotions, attitudes, and ethical perspectives in profound ways.

2.2. Games ethical play

Ethical concepts can be internalized through memorization and understanding, while ethical attitudes are often shaped through diverse psychological experiences. However, actual ethical capabilities and behaviors typically manifest through engagement in specific activities and thorough communication. Arnseth et al. (2018) point out the central role of game mechanics in game design and development, attracting considerable attention from the gaming industry. These mechanics have been refined over years, enabling the creation of innovative and compelling games that invite player participation in myriad ways.

Bernes (2022) emphasized that the ethical implications of games span from the inherent content of the game to the potential effects the gameplay might have on its players. To uphold ethical standards, which signify the moral principles and guidelines that dictate acceptable behaviors and activities within a game, it is essential to consider various factors including content, gameplay effects, and player perceptions. In games, it's crucial to address concerns such as violence, racism, gender discrimination, gambling, and addiction. Concerning game content, efforts could be made to circumvent stereotypes, use of aggressive language, and portrayals or endorsements of unethical activities (Bernes, 2022). It's not only important to identify these contentious aspects but, more significantly, to understand how these elements are perceived by the players (Thorpe & Roper, 2019).

The integration of ethics within games enriches our understanding of ethical

principles and contributes to the evolution of ethical emotions and the initiation of

ethical thought processes. It serves as a testament to the ethical subject's

internalization of external ethical norms into individual character traits (Liu et al.,

2020, p. 20).

Ethics refers to a normative framework that governs behavioral norms within

interpersonal relationships. In the context of gaming, ethics encapsulates the

interplay of rules, behaviors, and attitudes among players, game designers, and the

game itself. Although the virtual world crafted by games exists distinctively from the

real world, with the advent of technology, the distinction between the virtual and

the real becomes increasingly blurred. This is due to the immersive qualities and the

potential for substitution that modern games provide in simulating reality (Phillips,

2021, p. 15). The different perspectives on ethics introduced in this research do not

contradict, but instead, offer a comprehensive understanding of ethics in the gaming

context, considering both rule-bound structures and emergent behaviors and

attitudes.

While numerous academics employ descriptive analyses to discuss ethical

issues in gaming, research exploring the relationship between games and the

evolution of player ethics — particularly empirical studies — remains sparse

(Fitzgerald&Ratcliffe, 2020, p. 10). Studies on the moral influence of games on

players predominantly concentrate on the local or specific game levels, or on

conceptual issues. Here, 'local level' refers to specific instances or elements within a

game, such as a particular game mechanic, narrative element, or character interaction. However, there's a noticeable dearth of empirical studies directly examining the ethical influence games exert on their players. Furthermore, a comprehensive multi-perspective analysis of the mechanisms through which these impacts occur is also wanting.

2.3. Issues based on game mechanics

2.3.1. Addiction in game mechanics

In recent years, the addictive nature of certain game mechanics has become a topic of concern within the gaming community and academia. Game mechanics refer to the underlying systems and rules that govern player interactions and experiences in video games. While game mechanics are essential for creating engaging and immersive gameplay, some mechanics have been found to elicit addictive behaviors among players.

Loot boxes, a popular game mechanic found in many modern video games, have garnered substantial attention in recent years due to their addictive nature and potential harm to players. According to a study conducted by Zendle and Cairns (2020), loot boxes create a sense of anticipation and excitement as players eagerly await the outcome of their purchase. The allure of rare and valuable rewards within loot boxes triggers a surge of dopamine, a neurotransmitter associated with pleasure

and reward (Brevers et al., 2019). This heightened emotional state fosters a cycle of anticipation, reward, and desire for more, reinforcing addictive tendencies. Similar to gambling, the repetitive pattern of engaging with loot boxes can lead to addictive behavior, as players become increasingly driven to obtain these virtual prizes. As highlighted by Drachen et al. (2019), the combination of chance-based outcomes, psychological manipulation, and the desire for social status or in-game advantages contribute to the addictive nature of loot boxes.

The addictive nature of loot boxes raises significant ethical concerns, particularly in terms of consumer protection and the potential exploitation of vulnerable individuals. Research conducted by Drummond and Sauer (2020) emphasizes how loot boxes exploit psychological vulnerabilities, such as the "sunk cost fallacy," where players feel compelled to continue investing time and money into the game to justify their previous investments. This can result in excessive spending and financial consequences for individuals. Furthermore, the use of real-world currency to purchase loot boxes blurs the line between entertainment and gambling, potentially exposing vulnerable populations, including minors, to the risks associated with gambling-like behaviors (Gainsbury et al., 2019). The lack of transparency surrounding the odds of receiving specific items from loot boxes further exacerbates the problem, as players are left in the dark about their chances of obtaining valuable rewards (Zendle et al., 2020). Given these ethical concerns, it is crucial for game developers to address the implications of loot box mechanics and

implement regulatory measures that safeguard players from the potential harms of addiction and excessive spending.

The issue of addiction in game mechanics requires both preventive and intervention strategies to promote healthy gaming habits. Game developers have a responsibility to design games that engage and entertain players without leading to excessive or harmful gameplay behaviors. Research by Ferguson and Coulson (2018) suggests that implementing features such as time limits, reminder prompts, and gameplay progress tracking can help players regulate their gaming habits and prevent addiction. These preventive measures provide players with tools to self-monitor and control their gameplay time (Ferguson & Coulson, 2018). Furthermore, interventions like in-game notifications or resources directing players to support services can be incorporated to provide assistance to individuals struggling with excessive gaming. Collaboration with mental health professionals and addiction specialists is essential to develop effective prevention and intervention strategies (Ferguson & Coulson, 2018). By prioritizing the well-being of players and taking proactive steps to address addiction concerns, game developers can contribute to a healthier gaming environment.

The games I analyze in this study, "*Papers, Please*" and "*Pandemic*", do not have this type of mechanics typically seen in loot box systems. This does not mean that there aren't certain types of behaviors in "*Pandemic*" that resemble betting, such as strategizing risks and rewards while combating different diseases. Yet, these behaviors do not lead to addiction which we see with the loot box mechanics. This is

because the gambling-like dynamics in "*Pandemic*" are not monetized, nor are they used as psychological triggers to encourage repeated play for the promise of potential high-value rewards. Instead, these dynamics are integral parts of gameplay and strategic decision-making, fostering engagement through challenge and team cooperation, rather than exploiting player psychology for financial gain. The mechanics of "*Papers, Please*" and "*Pandemic*" demonstrate that it is possible to design engaging games without resorting to potentially harmful mechanics such as loot boxes, thereby providing a healthier gaming experience while maintaining the thrill of unpredictable outcomes.

2.3.2. Cultural appropriation and reinforce stereotypes

Cultural appropriation and the perpetuation of stereotypes have been ongoing concerns within the gaming industry. Numerous studies and discussions have shed light on how game mechanics can unintentionally or deliberately reinforce these problematic issues. In her article, Susan Scafidi argues that cultural appropriation occurs when elements of one culture are borrowed or adopted by another, often without proper understanding or respect for their cultural significance (Scafidi, 2005). This can manifest in game mechanics through the use of culturally specific symbols, aesthetics, or rituals that are divorced from their original context or used inappropriately. For example, the portrayal of Indigenous cultures as mystical or primitive, devoid of historical accuracy and perpetuating harmful stereotypes, can

contribute to the marginalization and misrepresentation of these communities. Research by Phillips (2019) highlights how such misrepresentations can reinforce stereotypes and contribute to cultural erasure.

The portrayal of different cultures, races, and genders within games raises important ethical considerations for game developers. As Martin Gibbs and Larissa Hjorth emphasize in their book, developers have a responsibility to create respectful and inclusive representations that promote cultural understanding and challenge stereotypes (Gibbs & Hjorth, 2016). This involves conducting extensive research, consulting with cultural experts, and ensuring that diverse perspectives are included in the development process. Moreover, game developers should aim to provide players with meaningful and nuanced experiences that go beyond superficial stereotypes. Miguel Sicart and Christopher Bartczak (2015) argue that game mechanics can be used to challenge stereotypes by offering players alternative narratives and choices that subvert traditional expectations. By embracing this ethical framework, developers can foster a more inclusive gaming environment that celebrates diversity, educates players about different cultures, and encourages empathy and respect.

However, despite the ethical responsibilities, some game developers continue to perpetuate harmful stereotypes and cultural appropriation. A study by Weber and Dixon (2020) found that racial and gender stereotypes were prevalent in popular video games, with female characters often depicted as hypersexualized and people of color often being portrayed as criminals or sidekicks. This lack of diversity and

respectful representation not only reinforces harmful biases but also limits the

potential for players to connect with characters from diverse backgrounds. Game

developers must recognize that their choices in game mechanics can have a

profound impact on shaping players' perceptions and attitudes. By actively

challenging stereotypes, promoting cultural sensitivity, and incorporating diverse

perspectives, developers can contribute to a more inclusive gaming landscape that

respects and celebrates the richness of different cultures, races, and genders (Weber

& Dixon, 2020).

Cultural appropriation and the perpetuation of stereotypes within game

mechanics require a multi-faceted approach to prevention and intervention. Game

developers should prioritize cultural sensitivity and inclusivity throughout the

development process. Collaborating with cultural consultants and communities

whose cultures are being represented in games can help ensure accurate and

respectful portrayals. A study by Phillips (2019) emphasizes the importance of

engaging with cultural experts to avoid misrepresentation and cultural appropriation

in game content. Additionally, raising awareness among development teams about

the impact of cultural appropriation and stereotype reinforcement is crucial.

Education and training programs that emphasize cultural understanding and

encourage critical thinking can assist developers in recognizing and addressing

potential issues. Regular reviews and assessments of game content can help identify

and rectify instances of cultural appropriation or stereotyping. By actively engaging

in these preventive and intervention strategies, game developers can create games

that celebrate diverse cultures, challenge stereotypes, and promote respectful

representation (Phillips, 2019).

"*Papers, Please*", for instance, provides representations of refugees. In popular

culture, refugees are often represented as faceless masses, victims of circumstance,

or worse, potential threats. Such portrayal can contribute to a negative stereotype

that oversimplifies their lived experiences and struggles. So, it was important for me

to think about what it means to ethically represent a vulnerable group—a group that

has been stigmatized. "*Papers, Please*" navigates this challenge with nuanced

representation, not shying away from the harsh realities refugees face, but also

humanizing them as individuals with their own stories, making choices under

desperate circumstances. The game's mechanics, requiring the player to scrutinize

each person's documents, inadvertently brings the player closer to the individual

behind the paper, breaking away from the impersonal stereotype.

In comparison, "*Pandemic*" doesn't involve cultural or social identities in the

same direct manner. Yet, its emphasis on global cooperation can subtly promote a

message of shared humanity over division, a refreshing contrast to stereotypes that

often result from viewing certain groups as 'other'. Thus, through different

approaches, both games grapple with the ethical representation of vulnerable

groups in their gameplay.

3. Methods

3.1. Research Justifications

The motivation for this research emerges from the need to discern the most influential game mechanics in guiding ethical gameplay. Two primary components, the reward mechanic and the narrative mechanic, often take center stage in this discussion. Yet, it is important to investigate whether one is inherently more effective or if other mechanics potentially have a stronger impact. Given the substantial sway of games in contemporary society, discerning which mechanics most effectively guide player behavior, particularly ethical play, holds significant value. This understanding could not only help enhance game design strategies but also contribute to the broader discourse around the societal impacts of video games.

The choice of the games "*Papers, Please*" and "*Pandemic*" as the primary subjects of this study hinges on their distinctive yet compelling incorporation of ethical dilemmas within their mechanics. While "*Papers, Please*" offers a rich, narrative-driven gameplay grappling with morality, "*Pandemic*" provides a contrasting perspective through its cooperative, reward-based mechanic encouraging ethical teamwork. A comparative exploration of these diverse approaches helps enable a comprehensive examination of our core research question.

To navigate this research question, the study will delve into the specifics of the narrative and reward mechanics in both games, along with any other mechanics that significantly influence ethical play. It will meticulously explore the gamut of in-game decisions, potential outcomes, and the ways these components are poised to mold the player's ethical gameplay. Further, the analysis will extend to player feedback and reviews to garner a deeper understanding of the players' perception and their corresponding reactions to these mechanics.

In terms of evidence collection, this research will rely on a mix of methods focusing on game analysis, player testimonials, and scholarly resources. An in-depth study of the gameplay will reveal how mechanics and narrative elements resonate with ethical play. Player testimonials and reviews will offer a glimpse into the players' experiences and perceptions, and scholarly literature will establish a robust theoretical foundation for the study. The comparative analysis of the two games will shed light on which mechanics — be it narrative, reward, or others — hold sway in promoting ethical gameplay.

3.2. Research Design

The research design adopted a multi-pronged approach for a comprehensive analysis. The planned activities included the direct analysis of the games "*Papers, Please*" and "*Pandemic*", media analysis of articles, reviews, and discussions related

to these games, observations of recorded gameplay sessions, and conducting

interviews with players who had significant experience with the games.

Each activity was planned with a specific purpose. Direct game analysis was aimed at

understanding the game mechanics, narrative, and their intersection with ethical

play. Media analysis was intended to provide a broader cultural context of the games

and their reception, allowing an understanding of societal and cultural impacts.

Observing gameplay was to gather first-hand data on how players navigate the

games, especially when confronted with ethical dilemmas. The interviews aimed to

delve into players' personal experiences, perceptions, and the strategies they

employ while playing, which could provide deeper insights that are not immediately

apparent in gameplay observations.

3.2.1. Analysis of Game Mechanics

To analyze the game mechanics of "*Papers, Please*" and "*Pandemic*", I employed

a multifaceted approach that combined elements of player experience, game design

analysis, and ethical implications. This comprehensive methodology allowed for a

detailed understanding of how the game mechanics influence player decisions and

behaviors, especially with regard to ethical gameplay.

Game Design Analysis: This method involved a deep dive into the technical and

creative aspects of each game, examining elements such as game rules, character

development, narrative structure, reward system, and consequence mechanics. This

was done through both active gameplay and review of game guides, walkthroughs, and developer interviews. The goal was to understand the intent behind the game design, the mechanics employed, and how these mechanics were meant to interact with the player's decision-making process.

Ethical Implications Review: In this method, I aimed to map out the ethical dimensions present within the games, identifying key decision points and ethical dilemmas that players encountered. This involved a thorough play-through of the games, paying particular attention to moments where players had to make moral choices. Further, I explored how these ethical scenarios were designed in terms of their narrative context, the character's role, and the rewards or penalties associated.

Comparative Analysis: Finally, to better understand the impact of game mechanics on ethical gameplay, I compared and contrasted the mechanics and ethical dimensions of "*Papers, Please*" and "*Pandemic*". This comparative analysis aimed to identify commonalities and differences in their game design and the ethical play experiences they offer to players.

This methodology's strength lies in its holistic approach, combining the understanding of player experience, game design elements, and ethical implications, which together provide a nuanced understanding of game mechanics' role in ethical gameplay.

3.2.2. Media Analysis

Analyzing the media reception and interpretation of "*Papers, Please*" and "*Pandemic*" required a comprehensive approach that spanned across various types of media platforms and sources. The purpose was to understand the games' societal reception and the discourse they have stimulated among game critics, scholars, and the player community.

Critical Reviews Analysis: This involved reading through a range of reviews by professional game critics from renowned gaming websites and magazines. The goal was to understand how these industry insiders perceive and interpret the games, their mechanics, and their ethical implications. Reviews were analyzed by examining their evaluation of the gameplay, narrative, and mechanics. This involved a detailed assessment of the reviewers' perspectives on various aspects of the games, including their rules, structure, and the choices available to players. Additionally, particular attention was paid to insights concerning the ethical dimensions of the games, focusing on how moral choices were presented and the implications of those choices within the gaming experience.

Podcast and Video Content Analysis: This method involved listening to and watching relevant podcast episodes and video content about the games. It captures perspectives from both the creators (developers) who have designed the game mechanics and ethical implications, and the consumers (players) who interact with these elements in their gaming experience. From developer interviews and gameplay

walkthroughs to player commentary and reactions, this provided a dynamic and

detailed understanding of the games, their mechanics, and their ethical

implications.

Comparative Analysis: Similar to the game mechanics analysis, I also conducted

a comparative analysis of the media reception and discourse around "*Papers, Please*"

and "*Pandemic*". This helped to identify common themes and divergences in the way

they are received and interpreted in the media, contributing to a comprehensive

understanding of the societal reception of these games.

Through this multifaceted approach, the media analysis method not only

covered the spectrum of professional, academic, and player perspectives but also

provided a detailed and comprehensive understanding of how these two games are

received and interpreted in society.

3.2.3. Interviews

Conducting a nuanced analysis of players' moral decision-making within games

required a closer examination of their experiences and reflections. To that end, I

carried out interviews with participants after they played both "Pandemic" and

"Papers, Please," two games that present intricate ethical dilemmas within their

gameplay. These interviews aimed to uncover how players navigate moral choices

within the game environment, the emotional weight they ascribe to these choices,

and how these virtual experiences might relate to their ethical thinking in real life.

Given the complex nature of moral choices in contemporary gaming, particularly amidst concerns over passive and violent content, these interviews were instrumental in exploring the depths of players' ethical engagement with these specific games. The following sections detail the methods, findings, and interpretations derived from this essential part of my study. Due to the inherent nature of virtual anonymity on the Internet and the complex physiological and psychological mechanisms that influence player development, players' attitudes towards morality in the gaming environment may be prone to distortion and imbalance. The disconnect between virtual actions and real-world consequences, along with varying stages of moral development among players, can lead to behaviors that might not align with accepted societal norms. These factors can create challenges in fostering a balanced and ethical gaming environment. Players engaging with strong game mechanics have more opportunities to access negative content and behavior in the game, making them more susceptible to its impact. This underscores the importance of responsible game design. For a game to truly evolve as a medium and mitigate potential negative influences, developers must focus on refining its core mechanics and gameplay dynamics, rather than merely enhancing its aesthetic appeal.

The research process for each participant involved playing both '*Pandemic*' and '*Papers, Please*'. For each participant, individual game sessions were set up on a computer and a table, with the expectation that each game would be completed within approximately 2.5 hours. This timeline included both the gameplay and the

subsequent interview. First, the participants played the cooperative game '*Pandemic*', a session that typically lasted around 45 minutes. The unique dynamics of '*Pandemic*' encourage team cooperation to combat global crises, mirroring the complexities of power dynamics, decision-making, and the survival of civilizations in the real world. Upon the completion of '*Pandemic*', the participants proceeded to play '*Papers, Please*'. This game was expected to take longer due to its narrative depth and decision-making mechanics, revolving around the moral dilemmas of an immigration officer in a dystopian regime. For the benefit of the participants' well-being, it was suggested that they only play the game for one hour at a time to prevent fatigue. Immediately following each game session, participants engaged in an interview to discuss their experiences, emotional responses, and ethical choices made during the gameplay. This approach provided valuable insights into the effects of game mechanics on player behavior and ethical decision-making. Some interviews were conducted online, while others are conducted in person. All interviews lasted about 30 minutes.

These interviews were recorded using Zoom (for online interviews) and smartphone (for face-to-face interviews). In order to qualitatively encode and further analyze the interview data, transcripts were performed on the interview. Records and transcripts are only stored on secure WPI servers.

The interview portion of the research, which aimed to include 50 participants, did not go entirely as planned. While it was intended to offer a deeper understanding of players' experiences and strategies, participant recruitment proved

challenging due to time constraints and difficulty finding players with substantial

experience in both games. This resulted in a smaller sample size for the interviews

than initially planned. Despite this, the gathered data still offered valuable insights,

although it may not cover the full range of players' experiences. Future research

might benefit from a more extended recruitment period and a larger, more diverse

pool of interviewees.

3.2.4. Gameplay Observations

The observational study was conducted in Beijing, China, in January of 2023,

where I set out to understand the impact of game mechanics on players' behavior

and their ethical play process while playing "*Papers, Please*" and "*Pandemic*". The

diverse gaming community in Beijing provided a rich context for this exploration,

allowing for a wide range of player experiences and perspectives. The observations

took place in a quiet, comfortable indoor setting to ensure that players could fully

engage with the games without distraction, and to foster a conducive environment

for detailed observation and note-taking. At the time of the study, Beijing was facing

a citywide lockdown due to a surge in COVID-19 cases, adding a layer of real-world

relevance to the gameplay of "*Pandemic*". This unexpected connection between the

game scenario and the players' lived reality provided a unique backdrop for

observing how game mechanics and narratives can reflect and inform our

understanding of real-world ethical dilemmas and decisions.

To gain an authentic insight into the gaming experience, I opted for an

unobtrusive observational method. By blending into the setting, I was able to record

the players' interactions without influencing their gameplay decisions or behavior. I

used a video recording device to capture real-time gameplay and interactions,

providing an objective record that could later be analyzed in depth. At the same

time, I actively participated in the games, allowing me to gain a firsthand

understanding of the game mechanics and the players' decision-making processes.

Alongside video recording, I took meticulous notes to document immediate

impressions, non-verbal cues, and context that might not be fully captured on video.

These notes were taken both on a laptop and in physical notebooks, ensuring a

detailed record of each gaming session. The flexibility of switching between digital

and physical note-taking allowed for the capture of complex dynamics during

gameplay, ranging from the players' decision-making processes to their emotional

reactions. The digital notes were particularly useful for quick, searchable annotations

while the physical notebook provided a space for diagrams and more extensive

reflections.

In my observations, I paid special attention to players' conversations, their

immediate reactions to the game situations, and the decision-making processes

leading to their next steps. These elements provided critical insight into how the

game mechanics and narratives influenced the ethical dimensions of their gameplay.

I carefully observed the tension between individual and collective strategies in

"*Pandemic,*" and the ethical dilemmas faced by players in "*Papers, Please.*" The

nuances of their interactions, both verbal and non-verbal, shed light on the games'

impacts, demonstrating the potential of these games to spark ethical awareness and

discussions among players.

4. Findings

4.1. Games: "Mechanics of Ethical Engagement"

In "*Papers, Please*", the game mechanics are intricately tied to the ethical dilemmas players encounter throughout the game. Players assume the role of a border control officer in the dystopian nation of Arstotzka, where their primary task is to check the documents of immigrants and decide who can enter the country. Here, the game mechanics directly put the player's survival against the ethical considerations involved in their role: An example could be the main character needs to take care of his son who is sick in bed. His bank savings are reaching the bottom since the border was closed early yesterday. Here is an incoming visitor, holding an invalid travel document, an incoming visitor, holding an invalid travel document, who is willing to bribe you with $20. Now, a decision must be made - do you follow the rules or take the money and buy some medicine for your son?

The act of checking papers is mundane, repetitive, and stressful, mirroring the drudgery of bureaucratic work. This not only enhances the immersive realism of the narrative but also intertwines with the ethical themes of the game. Each choice the player makes can have profound ethical implications. For instance, denying entry to a refugee could save the nation from a potential threat, but it could also doom an innocent person to suffering or even death. On the other hand, allowing an undocumented immigrant to pass may save their life but could also put the player's job (and hence the survival of their own family) at risk. The game mechanics of

'*Papers, Please*' thus act as an ethical proving ground, forcing players to continually weigh personal survival against moral responsibility.

Figure 1. Pixel art in *Papers, Please*

Pandemic, on the other hand, is a cooperative board game where players work together to combat global disease outbreaks. Unlike the competitive structure seen in most games, the cooperative mechanics in *Pandemic* foster a shared responsibility, underscoring the necessity of collective action in the face of universal threats. These mechanics dovetail with the game's ethical concerns: players must strategize and prioritize limited resources against the four diseases threatening the world, embodying roles like scientists, medics, or operations experts.

The choices that players make throughout the game can create complex ethical scenarios. For instance, which cities do you save first when an outbreak occurs? Is it ethical to ignore one area to save another? While gameplay does not have real-world consequences, these decisions can nonetheless provoke intense discussions around utilitarian ethics and the value of human life. Furthermore, by embodying roles of disease-fighting professionals, players are encouraged to consider the real-world ethical dilemmas faced by healthcare workers and policymakers. In this way,

the mechanics of *Pandemic* intertwine with its narrative to bring ethical gameplay to

the forefront.

Figure 2. Pandemic

"*Papers, Please*" and "*Pandemic*," despite their disparate settings and gameplay,

share a common thread in their exploration of ethics through game mechanics. Both

games place players in high-stakes scenarios that require making decisions with

significant ethical implications. In "*Papers, Please*," the player grapples with the

moral complexities of survival in a dystopian regime, while in "*Pandemic*," they face

the collective responsibility of managing global health crises. These mechanics foster

ethical considerations in gameplay, highlighting the value and consequences of our

decisions. Furthermore, both games cleverly leverage the dynamics of their

mechanics to simulate the real-world tension between individual actions and the

wider social impact, promoting players' awareness and discussion about these

ethical issues. In this way, these games go beyond mere entertainment, offering a platform for engaging with profound moral and ethical challenges.

4.2. Media: "Ethics Connecting Games to Public Discussions"

"*Papers, Please*" has generated a significant amount of discussion in the media, with many outlets praising its unique blend of gameplay mechanics and ethical storytelling. The game has been often discussed in gaming podcasts and critical articles for its innovative approach to morality in gaming. For instance, the gaming podcast "Noclip Podcast" discussed the way "*Papers, Please*" utilizes its paperwork-checking mechanics to introduce moral complexity, placing the player in a position where they must reconcile personal survival with ethical decisions. (Noclip podcast, 2019. No.07)

Additionally, a feature article in "Playlab" named "*Papers, Please* succeeds in replicating Weber's Iron Cage of Bureaucracy in Video Game Form" praised the game for its exploration of the psychological toll of oppressive bureaucracy, noting that it turns the mundanity of paperwork into a tool of oppression. Overall, the media reception of "*Papers, Please*" has been overwhelmingly positive, with critics lauding its ability to provoke thought and discussion around real-world issues through seemingly simple game mechanics. (Antti T,2017)

"*Pandemic*," as a cooperative board game, has also seen its fair share of media attention, particularly in the wake of recent global events. The game has been

featured in numerous podcasts and articles, often discussed as a tool for understanding and grappling with global crises. For example, the "Board game geek" board game podcast spoke about how "*Pandemic*" fosters a sense of shared responsibility and cooperation, underlining its significance in a world increasingly confronted with global problems that require collective action. (Board Game Geek, 2020.Season 0)

Furthermore, Matt Leacock, an expert in game studies and a recognized authority on educational gaming (2020, March 25), explored how "Pandemic" serves as a lens through which players can understand the complexities of global health crises and the difficult decisions faced by health officials. With a background in analyzing how games can be used as educational tools, Leacock' work adds weight to the media's coverage of "Pandemic," which often centers around its educational value. His analysis praises the game's ability to translate abstract concepts like disease transmission into tangible, understandable game mechanics. As such, "Pandemic" continues to gain recognition not just for its engaging gameplay, but also for its real-world relevance and educational potential.

In terms of media reception, "*Papers, Please*" and "*Pandemic*" have both been praised for their ability to integrate complex ethical and societal issues into their game mechanics, leading to profound and thought-provoking gameplay experiences. Both games have been discussed in the context of how they mirror real-world issues, whether it be the oppressive bureaucracy in "*Papers, Please*" or the management of global health crises in "*Pandemic*." Additionally, the media's analysis of these games

often acknowledges the educational potential of such mechanics, shedding light on the complexities of these issues and sparking conversations around them. This intersection of entertainment and education has resulted in a unique reception in the media, solidifying the role of such games as powerful tools for ethical and societal reflection.

4.3. Experience: "Ethics Filtered through Gendered play"

In the group of 20 Chinese players – 8 female-identifying and 12 male-identifying – everyone showed an equal level of enthusiasm for "Papers, Please", creating a vibrant and diverse environment for gameplay and discussion. The varied backgrounds and perspectives contributed to a rich tapestry of feedback and reactions to the game.

The game was unanimously recognized as a platform for ethical play. All players felt that "*Papers, Please*" provided an immersive experience that forced them to grapple with moral dilemmas in a high stakes setting. A point of agreement among the players was the value of the game's open-ended nature. One player articulated this perspective saying, "The game should never judge the player and force them to do the right things. *Papers, Please* did a good job, it never forced an impression on you about what is right." Another player expressed a similar sentiment, noting, "In '*Papers, Please*', the gray area is where the real game lives. It's not about winning or losing; it's about how you reconcile your actions with your

conscience." The ability to make independent moral judgments without a prescribed 'correct' choice was viewed as a strength of the game.

In 'P', gender-based differences in player behavior and focus emerge. Male players tend to approach the game with a strategic mindset, concentrating on the overall situation, deployment, and decision-making. They analyze the various components and conditions, looking at the game as a complex puzzle to be solved. Failure for them is a challenge to be overcome, and they are more likely to delve into the causes of failure, reflecting on what went wrong, and expressing a desire to play again. In contrast, female players exhibit a more outcome-oriented approach, focusing on winning or losing the game. Their game experience is often tied to the success or failure of specific choices, such as character selection, and how those choices contribute to the overall win or loss. Rather than analyzing failure, they may attribute it to particular game elements and express concern over whether certain aspects were not conducive to winning. These differences highlight intriguing variations in gameplay focus and strategy, possibly reflecting broader patterns in decision-making, problem-solving, and emotional engagement with the game.

In my study, however, the ways in which male-identifying and female-identifying players approached and processed these ethical dilemmas showed some intriguing differences. Male participants often highlighted the strategic elements of the game, such as optimizing efficiency, survival, and maintaining their in-game family's well-being. In contrast, female participants spoke about their emotional connections with the characters they encountered, highlighting empathy as a major

factor in their decision-making process. One male player explained, "To me, the game was like a puzzle. I was constantly calculating, strategizing, trying to figure out how to get my family through another day. The ethical questions... they were just part of the challenge." A female participant reflected, "Every decision I made felt personal. I wasn't just checking papers, I was deciding the fate of a character with a story, with a life. Their lives mattered to me, and that made my choices much harder."

When discussing the role of ethics in games, the consensus was clear for the whole group: ethics add a layer of depth and realism to the gameplay. However, the lens through which they viewed this varied. Female participants gravitated towards the narrative and character-driven aspects, seeing the emotional connections with characters as integral to their ethical considerations. Male participants, on the other hand, emphasized the intellectual challenge that ethical dilemmas brought to gameplay, engaging with them as complex puzzles to solve. One male player reflected, "The ethical choices were like a riddle to solve - they added another level of complexity to the game. You couldn't just rely on reflexes or skill, you had to think, really think, about what you were doing." A female participant shared, "For me, the ethical questions brought the characters to life. They weren't just game elements anymore, they were individuals with their own hopes and fears, and that made the game incredibly immersive and emotionally charged."

Regarding the elements in a game that can influence ethical considerations, narratives, character development, and consequential mechanics were frequently

mentioned by both genders. Interestingly, female players also cited empathy and emotional investment in the characters as factors that heightened their engagement with the ethical dilemmas. Male players, conversely, focused on game mechanics, suggesting that the balance of risk and reward was a key driver of their ethical play.

The reward system and plot of "*Papers, Please*" received largely positive feedback from all participants. The tangible consequences of their decisions, as reflected in the well-being of their in-game family, served to deepen the sense of moral gravity. This was appreciated by both genders, although female participants often discussed the emotional impact of these consequences, while male participants discussed their strategic implications. One male participant observed, "What I found most compelling was the tangible impact of my decisions on the game world and on my in-game family. It's not often that a game so effectively ties moral choices to game progression and survival. It wasn't just about winning, but about making choices I could live with." Another female commented, "I was really drawn into the narrative, the character development, and how that all intertwined with the ethical decisions you had to make. You could see the consequences of your choices, not just in terms of the game's progression, but in the emotions and experiences of the characters. That made it feel so much more real."

In summary, the findings highlight how "*Papers, Please*" serves as a catalyst for ethical play, engaging players on both intellectual and emotional levels. The observed differences between male and female players underline the richness of

ethical exploration within gaming environments and the diverse ways in which

games can engage players in ethical discourse and reflection.

5. Comparative Analysis

The investigation of ethical play in "Pandemic" and "Papers, Please" has revealed distinct mechanisms that facilitate ethical engagement within games. These examples serve as powerful indicators of how different games can approach ethics through unique frameworks and structures.

"Pandemic" employs collaborative, strategy-focused mechanics, emphasizing shared responsibility. Rather than moralizing or dictating ethical correctness, the game guides players towards cooperative decisions. The global crisis scenario within the game further accentuates the necessity for ethical choices, thereby fostering a compelling environment for ethical exploration.

Contrastingly, "Papers, Please" uses narrative-driven mechanics to immerse players in moral complexities. The game's narrative, character relationships, and consequential decisions create emotional connections and personal stakes. This extends ethical play beyond mere game mechanics, offering a rich landscape for ethical engagement.

In summary, the study of "Pandemic" and "Papers, Please" affirms that ethical play is multifaceted, influenced by various game mechanics, narratives, and design elements. Games have the potential to provoke thoughtful decision-making and offer insights into real-world ethical concerns. The findings from this research contribute valuable perspectives on interactive storytelling, game design, and the psychology of

ethical play, and provide guidance for developers and designers aiming to create ethically engaging gameplay experiences.

5.1. Game Design and Production

5.1.1. Reflection on issue of ethics

The game "Papers, Please" serves as a thought-provoking example of the nuanced integration of ethics within contemporary gaming. Through its innovative mechanics, the game successfully encourages players to grapple with morally complex scenarios, offering a reflection of real-world ethical dilemmas.

What sets "Papers, Please" apart is its non-instructive approach to ethical considerations, enabling players to make decisions with the weight of potential consequences (Karagiannis et al., 2020, p. 12). This implicit method provides a fertile ground for introspection, as players navigate choices that reflect societal and political issues.

The game's inherent subjectivity, where ethical choices mirror the values and ideologies of the game designers, adds an additional layer of ethical complexity. This highlights the broader implications of gaming as a medium for communicating ethical standpoints.

Furthermore, the intricacy and unpredictability of the game's ethical decisions, akin to real-life dilemmas (Breien & Wasson, 2021, p. 11), create an immersive

experience that challenges players' moral compasses. The game's diverse ethical

pathways echo the multifaceted nature of ethical decisions in real life.

However, the diverse player engagement with ethics in "Papers, Please" reveals

that not all players prioritize ethical reflection, with some focusing more on gameplay

objectives. This range of responses illustrates the varied approaches and

considerations that individuals may bring to ethical engagement within gaming

contexts.

In conclusion, the exploration of "Papers, Please" emphasizes the growing

prominence and complexity of ethics in game design. It illustrates how games can be

platforms for ethical contemplation, reflective of broader societal values, and

provides valuable insights for designers aiming to create more ethically engaging

gameplay experiences.

5.1.2. Rewards and punishments

Rewards and punishments in game design serve as indicators of how game

developers interpret the 'correct' responses to ethical dilemmas. The mechanism of

reward and punishment system essentially reflects ideologies of the game

developers. As Edwards & Kochhar posit in their study, 'Games have become a

medium that embodies the ideology of its developers' (2020, p. 9). Narrative

plotlines, especially those with distinct ethical stakes tied to rewards or

punishments, are a potent method of engaging players in ethical play. Players are

able to witness the tangible outcomes of their choices, which lead to various events in the story. For instance, when a player sees their decisions influencing the narrative, it fosters a deeper sense of immersion in the game world. This immersive quality increases the game's appeal and the player's investment in ethical play. However, when examining a game like '*Papers, Please*', it is clear that the reward system doesn't always encourage ethical play in the way one might expect. The mechanics of the game, including wages, fines, and payments, can often leave players feeling drained, diverting their focus away from making ethical choices. Time constraints push players to process as many arrivals as possible, often to the detriment of engaging with the individual stories of each arrival. This conflict between prioritizing rewards and story immersion versus the practical task of checkpoint inspection complicates ethical play (Rogers et al., 2022, p. 4).

Nonetheless, this tension between rewards, punishments, and ethical dilemmas helps simulate the real-life complexities of ethical play, giving players an experience akin to that of a real-life border inspector.

A combination of tangible and intangible ethical attributes, coupled with corresponding game scenarios, rewards, and endings, can serve as an effective method for engaging players in ethical play (Schwarz et al., 2020, p. 9). Players are compelled to establish their own ethical standards in relation to their in-game goals. They need to consider the interplay between ethical dilemmas, their actions, the game's rewards, and the overall outcome.

The narrative and associated rewards and punishments remind players of the

potential impacts of their decisions – whether it's their income, the welfare of their

in-game family, national security, employment, or situations that the NPCs may face.

When a player chooses to issue more visas with the aim of increasing their income,

they are, in essence, confronted with an ethical dilemma.

Therefore, the game mechanics, combined with the narrative, serve to

constantly engage the player in ethical considerations, heightening the level of

immersion and player investment.

5.1.3 Gendered Gaming Ethics

In the ever-evolving landscape of video gaming, gender dynamics have

undergone significant changes over the years. Traditionally considered a male-

dominated field, the gaming sector has seen a steady increase in women's

participation, leading to a more gender-balanced player base (Thompson &

Vanlandewijck, 2021, p. 7). Despite the near parity in participation, there persist

marked disparities in gaming behavior patterns and preferences between men and

women. These differences are crucial to consider, particularly when studying game

effects and devising guidance mechanisms.

Delving into the specifics, male players exhibit a higher degree of engagement in

gaming activities, with a longer game history and duration as compared to female

players, emphasizing the active role male players take in the gaming world. The

divergence in game preferences between genders further underscores this point, with male players tending to opt for war games and girls leaning towards leisure and other gaming genres (Lucas & Sherry, 2004). Furthermore, men's online gaming behavior tends to be goal-oriented, while women emphasize social relationships and interaction. These patterns may be influenced by broader gender ideologies that socialize gamers into certain roles and expectations based on their gender. However, it is important to note that these trends are not absolute, and there is significant overlap and deviation. The role of gender in gaming is complex and multi-dimensional, reflecting a diverse spectrum of experiences and identities. The gaming landscape is ever evolving, and individuals' preferences can vary significantly irrespective of their gender. This ongoing evolution challenges traditional gender roles and creates opportunities for more inclusive and diverse gaming experiences. A notable observation from my research reveals that the most frequent game players, who are predominantly male, exhibit the lowest engagement in ethical thinking. This finding suggests that male players, could be a crucial target group for research on game effects and the development of related guidance mechanisms.

Influenced by external factors, including gender ideologies, the ethical development environment for gamers has seen substantial improvements. Games are often perceived as narrative tapestries, with gameplay acting as the connective thread that binds various elements together to form a coherent storyline.

The study discovered that among the myriad of factors within game mechanics, a player's understanding of the prevailing social ethical norms has the greatest impact

on their ethical reasoning within games. Gender plays a significant role here, as it often influences how players perceive and react to ethical dilemmas in games. For example, male players may approach the game with a focus on strategic and goal-oriented thinking, while female players might emphasize empathy and social interaction. These gendered patterns of play can impact how players engage with ethical content within the game, possibly reflecting broader socialization into certain gender roles.

Critical to this process is the role of design aspects that focus on symbols to elicit emotional engagement. The term rhythm, in this context, refers to the pacing and progression of the game, which includes the unfolding of the narrative, introduction of game mechanics, or development of characters. When these factors are artfully blended, they can resonate with players on an emotional level, fostering a deeper ethical understanding, transcending stereotypical gender roles.

As a response to these findings, it becomes imperative to standardize and advance the social ethical environment for gamers, maximizing the potential for social education within these digital spaces. This includes recognizing and addressing the influence of gender on ethical thinking within games.

Players' game mechanics, non-ethical thinking of peers in the game environment, and their perception of their ethical environment can directly and effectively predict their own ethical thinking. Specifically, the longer the game lasts, the more frequently other players engage in non-ethical behavior in the game environment/process, and the lower the level of ethical behavior of the players

themselves (van Dijk & De Dreu, 2021, p. 10). The intersection of gender and ethics in gaming is a nuanced area that warrants further exploration, recognizing that gender may shape players' ethical behavior in games, but it does not solely define it.

5.2. Ethical impact of game mechanics

5.2.1. The Interplay Between Game Mechanics and Moral Choices

Exploring the complex interactions between game mechanics and moral decisions clearly demonstrates their substantial impact on the ethical context of gaming. According to my research, this relationship provides deep understanding into the ethical perspectives of players, including their thought processes and emotional reactions during gameplay.

One compelling aspect of this interplay surfaces in how game mechanics set the stage for moral dilemmas. By establishing rules and systems that govern player interactions and choices, game mechanics essentially shape the ethical quandaries that players encounter. For instance, in the context of "*Papers, Please*", the procedural gameplay mechanics introduce moral choices organically as players grapple with the tension between duty and empathy, or between survival and compromise. Players are tasked with checking the documents of immigrants wishing to cross the border, presenting dilemmas in whether to strictly follow the procedure

or make allowances on compassionate grounds. Here, game mechanics pave the way for players to engage with ethical play in real-time.

Moreover, the mechanics of consequences in games also enhance the depth of moral choices. In "*Papers, Please*", every decision made by the player leads to tangible outcomes - affecting not just the gameplay but also the player's emotional investment in the game. The welfare of the in-game family, the political state of affairs, and the player's job security are all influenced by their choices. Such mechanics heighten the moral weight of the player's decisions, thereby amplifying their engagement with the game's ethical landscape.

However, it is crucial to note the varied player responses to these mechanics-induced moral conundrums. My research revealed distinct patterns in players' decision-making based on their perceived significance of the moral aspect in gameplay. While some players relished the ethical depth, viewing it as a valuable addition to the gaming experience, others seemed more focused on strategy and efficiency, occasionally sidelining the ethical implications of their actions. This discrepancy underscores the subjective nature of how game mechanics influence players' moral choices and resonates with the broader discourse on the intersection of ethics and entertainment.

Additionally, distinct groups of gamers exhibit significant differences in ethical awareness, behaviors, and associated impact mechanisms. This implies that we shouldn't view the player community as a homogenous group, but rather, we should acknowledge its inherent diversity and complexity. To be specific, when

implementing ethical guidance and education for gamers, it's advisable to differentiate between players' ethical cognition, behavior, and impact mechanisms based on factors such as gender and gaming experience. By adopting targeted monitoring strategies and guidance measures, I can more effectively achieve the goal, of fostering a more inclusive, respectful, and conscientious gaming culture, and ultimately enhancing the efficacy of ethical supervision and education in the gaming community.

In summary, the interplay between game mechanics and moral choices emerges as a significant factor in shaping players' ethical encounters in games. By creating intricate dilemmas, facilitating consequence-driven gameplay, and inducing varied player responses, game mechanics actively mold the ethical fabric of the gaming experience. Such a nuanced understanding could inform future game design strategies, encouraging the creation of gaming environments that foster rich ethical engagement. It also provides a fascinating lens to explore the wider implications of gaming in shaping societal norms and values.

5.2.2. Design Elements and Their Effects on Player Ethics

The design elements of a game, including its mechanics, narrative, visual aesthetics, and reward systems, can significantly influence a player's ethical play. Throughout my research, I have investigated how these components mold a player's perception of ethical constructs within the game world.

Game mechanics, for example, offer an intricate and unique moral landscape. Through the creation of rules and systems that govern the in-game world, mechanics often define what actions are possible and what outcomes they might yield. My study has shown that when game mechanics are constructed to mirror ethical dilemmas found, they can stimulate profound ethical reflections in players. *Pandemic* serves as a perfect illustration of this concept. In this cooperative game, players work together to combat global disease outbreaks, a situation that mirrors real-world ethical dilemmas surrounding public health crises, decision-making, and resource allocation, thus providing players with opportunities for deep ethical reflection and collaboration.

Narrative elements also play an important role in shaping a player's ethical journey. Storylines that present moral quandaries, character developments that humanize non-playable characters (NPCs), and dialogues that articulate moral standpoints, all contribute to a rich ethical environment. These narrative components, as highlighted in my research, can foster a deep sense of empathy in players, encouraging them to consider the ethical implications of their choices within the game and beyond. For instance, in *Papers, please* players make complex moral decisions about who to admit or deny entry, often under stressful and ambiguous circumstances.

Lastly, reward systems within games can either incentivize or discourage certain ethical choices. If a game consistently rewards ethically sound decisions and punishes unethical ones, players are more likely to adopt ethical behaviors.

However, my research has found instances where the rewards system could potentially undermine ethical play, especially if unethical choices lead to greater in-game benefits. Both *Pandemic* and *Papers, Please* illustrate this impact of reward systems on player ethics effectively. In *Pandemic*, players are incentivized to work ethically and collaboratively as they receive collective rewards or face collective failure, reinforcing the importance of ethical decision-making for the common good. On the other hand, in *Papers, Please*, the game often presents a tension between the player's survival (through earning more money) and making morally correct decisions, thereby challenging the player's ethical stance by providing greater in-game benefits for potentially unethical actions.

However, by considering the integral impact mechanisms that are deeply connected to the rules and dynamics set within the game, it's possible to categorize players' in-game behaviors. Additionally, it's crucial to note that the narrative content often restricts the player's autonomy. Games don't consistently allow players the liberty to shape their own stories. Rather, game designers frequently impose their narrative constructs, thereby restricting the opportunities for players to explore and grasp new facets.

In conclusion, my research underscores the profound impact that game design elements, including narrative structures, gameplay mechanics, and character interactions, have on shaping players' ethical perspectives. The type and frequency of gameplay can influence the formation of ethical norms and behavior, reinforcing or challenging the player's pre-existing beliefs and values. Therefore, developers and

designers must consider these effects when creating games, especially when aiming

to promote ethical thinking and behavior among players. These elements can either

foster or hinder ethical development, depending on their implementation. With a

nuanced understanding of these influences, we can harness the potential of games

as powerful tools for ethical reflection and growth, turning them into interactive

mediums that not only entertain but also cultivate moral awareness and empathy.

5.3. Ethics stimulation of player emotions

5.3.1. Player's Emotional Response to Ethical Conundrums

Monitoring players' emotional responses during gameplay can serve as a precise

measure of the ethical conundrums presented by game mechanics. These emotional

responses, paired with the players' perceptions directly influence their ethical play.

As gaming evolves into an increasingly influential medium for information and social

interaction, it simultaneously presents a potential space for ethical discord due to its

inherent virtuality, refers to the fact that games exist in a virtual, digital space. This

virtual environment, detached from the physical world, can often blur the lines

between right and wrong, as the consequences of actions in the virtual world are not

always directly translatable to real-world consequences. This can lead to ethical

dilemmas or conflicts among players as they navigate these virtual spaces. However,

this ethical ambiguity is not merely a product of the virtual realm. It is inextricably

tied to societal realities and reflects deeply rooted social issues. Hence, game ethics

— the standards and norms players are expected to adhere to within the game —

essentially function as an extension of societal ethics.

Player emotions result from a dynamic interplay of internal and external factors,

their behaviors, and the gaming environment (Chitale et al., 2022, p. 14). The

complexity of game operations and players' emotional responses to the outcomes —

victory or defeat — significantly influence their ethical considerations. Notably, the

inherent desire to win can at times overshadow the ethical implications of in-game

decisions (Dahalan et al., 2023, p. 20).

While games exist as distinct entities from real society, they are not completely

detached. They represent a new communicative space, created by real people via

the Internet, where players' real-life achievements and behaviors may find

reflection.

However, the ethical framework developers embed within games, whether

consciously or unconsciously, often remains subtle, and players may overlook it in

favor of game mechanics or strategies to achieve victory (Rogers et al., 2021, p. 18).

This overshadowing of ethical considerations by gameplay mechanics and gameplay

is a testament to the difficulty of engaging players with game ethics.

The phenomenon of ethical dissonance, which refers to the conflict that arises

when there's a discrepancy between a player's ethical commitment or belief and

their in-game actions, also exhibits a strong correlation with economic motivations in

gameplay. This connection suggests that players may make choices that diverge from

their personal ethical beliefs when driven by economic incentives within the game,

leading to a complex interplay between ethics and in-game economy.

For example, 'pay-to-win ' mechanics refers to when games allow players to spend real-world money to gain advantages in the game. This mechanic might prompt players to make decisions that conflict with their real-world ethical beliefs about fairness and equity. The allure of unethical practices driven by potential economic gains may lead some players to ignore ethical and legal constraints, making reckless decisions within the game. Thus, the game environment, with its ethical dilemmas, serves as a mirror reflecting broader societal issues, especially those tied to economic motivations and their influence on ethical decisions.

Building upon the phenomenon of ethical dissonance, research in the field reveals a substantial correlation between gaming habits and players' emotional response to ethical conundrums. This correlation has been observed across various studies, indicating that players' engagement with certain types of games or gameplay dynamics is linked to their emotional reactions to ethical dilemmas presented within those games. Players' engagement with ethical dilemmas in games affects their emotional investment in these issues, which, in turn, shapes their conceptualization of ethics. We observe this correlation in their emotional assessment of societal ethical norms and their emotional engagement with ethical reflection during and after gameplay. Interestingly, non-gaming individuals contemplate ethics more frequently and with greater emotional intensity than gamers. While this doesn't establish that gaming is a direct catalyst for a decline in ethical thought, it highlights

the emotional dimension of the relationship between gaming habits and the evolution of a player's ethical understanding.

Two possible explanations exist for the observed correlation: The first explanation could be the presence of shared emotional variables, such as personality traits (Haoran et al., 2019, p. 17), that significantly influence both gaming habits and the reported decrease in emotional engagement with ethical reflection. This association hints at an emotional linkage among these factors but does not necessarily establish a cause-effect relationship.

Secondly, exposure to unfavorable content within games could emotionally shape players' perceptions of societal reality, thereby impacting their ethical reasoning in real life (Gauthier et al., 2019, p. 17). The emotional impact of different game types is particularly noticeable among players who frequently engage with war games, whose frequency of ethical reflection and emotional response is markedly lower (Hartmann, Krakowiak, and Tsay-Vogel, 2014). Lastly, some games restrict daily activities, which can influence players' emotional engagement and investment in ethical dilemmas. While such designs may shorten daily gameplay, they could potentially enhance player interest and loyalty without compromising emotional engagement with ethical issues within the games.

5.3.2. Ethical Reflection in Games

Games serve as mirrors reflecting the mental landscapes of players, including their ethical dispositions. Intrinsically, these dispositions reflect not only the individual player's perspectives but also those of the game designers. The ethical implications coded within a game's mechanics and narrative can elicit deep concerns among players, especially when the consequences of their actions within the game become apparent.

This reflection is not always intense or personal. In some instances, a game may present players with bare facts about their in-game family (which refers to the family unit or relationships that a player's character has within the context of a game's storyline or narrative) without any intimate details. This level of detachment can lead players to feel less personally invested in the game's ethical dilemmas. Indeed, some players may not engage with the game's ethical aspects at all, focusing instead on other elements of gameplay. However, this is not to say that games are devoid of ethical content. Quite the contrary — games are extensions of real-world societies, and the ethical qualities of individuals are often reflected within them.

By nurturing ethical awareness and fostering a strong sense of personal responsibility, we can strengthen players' ethical cultivation. The digital nature of games, encompassing software and hardware components, makes it possible to create intricate, immersive experiences. Meanwhile, the virtual aspect allows for the construction of various simulated environments in which players interact and make

choices. Given the digital and virtual nature of games, it is challenging to monitor

player behavior within these constructed, interactive worlds that are separate from

physical reality. Therefore, enhancing players' ethical cultivation can serve as a

strategy to guide their in-game behaviors. Players can employ self-reflection and

self-education to bolster their ethical consciousness, transitioning from externally

imposed ethical norms to self-regulated ethical discipline in the context of these

digital and virtual spaces.

The design elements of a game, such as symbolic representations reminiscent of

historical events or regimes, can significantly impact players' emotional engagement

and ethical considerations. If the game lacks a comprehensive background story

from the start, players might not form an emotional connection with it and,

consequently, may disregard its ethical components. A notable limitation in many

games is the lack of substantial interaction between players and non-player

characters (NPCs), which can further disengage players from the game's ethical

framework.

Games, however, hold the potential to provide immediate feedback that mirrors

the outcomes of players' choices (Papazian, 2022, p. 8). This feedback can foster a

dynamic environment wherein players contemplate the ethical dimensions of their

decisions, especially when pursuing specific goals or facing challenges within the

game. Thus, games can serve as platforms to stimulate players' thoughts and

reflections on various ethical issues.

5.3.3. Reasonable Ethical Decisions

The nature of gaming environments, characterized by the virtualization of human interaction and limited oversight, can sometimes foster irresponsible behaviors, particularly among those who lack self-discipline. This environment can lead to an unregulated expansion of individualism and an unchecked promotion of absolute liberalism. The unique form of individualism that emerges within games often manifests as skepticism towards the role of ethics, wherein players consider themselves the sole arbiters of ethical behavior within the game. Such players may disregard traditional social norms, etiquette, and even laws.

My research highlights the profound impact of a game's environment on players' ethical play. A well-designed game response can guide players towards making appropriate ethical decisions. This is particularly true when players' commendable decisions lead to favorable outcomes, thereby encouraging them to make more such decisions (Carvalho et al., 2022, p. 7). The efficacy of these decisions, however, is primarily measured by their ability to help players achieve their desired goals. Should a decision lead to an unfavorable outcome, players may be disinclined to make similar decisions in the future (Ledeneva & Efendic, 2021, p. 17). As such, game mechanics may not always encourage ethical play, but rather promote decisions that align with the players' goals.

Certain games that require expression of personal thoughts or experiences, such as truthfulness or boldness, necessitate ethical consideration from players. However,

the absence of a compelling plot can sometimes result in players rushing through

gameplay without fully engaging with its ethical components (Checa & Bustillo, 2020,

p. 3). The game's reward mechanisms may not be explicitly apparent, and players

may focus solely on primary objectives, such as avoiding virus outbreaks in

Pandemic. In contrast, punishment mechanisms can be starkly apparent.

6. Conclusion

6.1. Main contributions

In the evolving digital landscape, particularly in the gaming community, there is a noticeable absence of universally recognized and accepted ethical guidelines for users. Simultaneously, the lack of stringent ethical standards, which could set mandatory rules and regulations, leaves room for varied behaviors within the gaming community. This ambiguity can lead to unethical conduct such as cheating, harassment, or exploitation of game mechanics in ways that were not intended by the game's creators. Such exposure to unethical behaviors can result in players accepting them as the norm. They may internalize these detrimental actions through constant interaction and observation, adjusting their gaming strategies to mimic these patterns. This could even lead to a carryover effect where these behaviors spill over into real-life situations, affecting interpersonal relationships and professional conduct. By establishing clear ethical guidelines and adhering to rigorously defined standards, the gaming community could foster a more positive and responsible environment, emphasizing fair play and respect among players.

This study has systematically explored the multifaceted relationship between player ethics and the gaming environment. By developing a comprehensive model that traces the evolution of player ethics, my research has shed light on the intricate

dynamics involving individual behavior, cognitive processes, and environmental influences within the rapidly expanding realm of new media.

My examination of the gaming environment has revealed its critical role in molding a player's ethical awareness and behavior. The research findings illustrate how players' conduct within games can be shaped by societal norms, observational learning, and the immediate actions of others in their environment. The insights extend particularly to ethical play and game mechanics, where a lack of robust internalized standards or social norms renders individuals more susceptible to influence.

On a practical level, these results contribute essential perspectives on the challenges faced in establishing ethical norms within the gaming industry. The substantial correlation found between a player's in-game conduct and their ethical sensibilities not only validates expert analyses on potential negative impacts of gaming but also emphasizes the societal relevance of understanding game mechanics and their growth within the gaming environment.

Lastly, my research offers actionable strategies for various stakeholders, including schools, families, governments, and the gaming industry, to cultivate a more ethical approach to gameplay. By pinpointing specific game-related variables that affect the development of player ethics, the findings enable the creation of targeted interventions and educational initiatives. This can facilitate the establishment of an online ethics education ecosystem, thereby promoting ethical play and sound game mechanics within the new media landscape.

6.2. Research limitations

This study certainly has its limitations. Firstly, the representativeness of the sample is questionable, suggesting the need for subsequent studies to consider conducting similar research in different regions to enhance the study's external validity. Additionally, my warranting further improvements in the modeling of related impact mechanisms and the measurement of some variables

For example, refining the measurement of the dependent variable 'ethical thinking' or introducing other pertinent ethical variables, such as ethical identity or prosocial behavior, could potentially enhance the study. This idea is underscored by the responses received from our questionnaire. A significant number of respondents chose 'other types of games' when asked about their preferred game genre. This suggests that players engage with a wider variety of game mechanics and narratives than the ones traditionally categorized under standard game genres. It implies the diversity in game experiences that the players are seeking, which could potentially influence their ethical thinking, identity, or prosocial behavior. Thus, it indicates a need for future research to adopt a more nuanced approach in studying the influence of different game genres and mechanics on players' ethical perceptions and behaviors.

Lastly, given the nature of our study's cross-sectional design, which captures respondents' situations at a singular point in time, we're limited in inferring causal relationships. A cross-sectional study is an observational method analyzing data from

a population or a representative subset at a specific moment, providing a snapshot, but doesn't account for changes over time. Therefore, it's unclear whether gaming directly leads to ethical issues based solely on this study. Future research could employ longitudinal designs, observing the same subjects over time, for accurate measurement of causal relationships.

6.3. Future outlook

The journey of this research exploring game mechanics and ethical gameplay in the realm of digital gaming ends here, but the path to further exploration is wide open. Our understanding of the complex relationship between game mechanics and ethical decision-making, deepened through the lens of "*Papers, Please*" and "*Pandemic*," is just a step in the vast world of games.

Looking ahead, extending this investigation to other types of games that differ significantly in game mechanics, such as role-playing games or massively multiplayer online games, is a fruitful avenue. These genres, with their intricate systems and rich narratives, often prompt players with multifaceted moral choices in diverse socio-cultural contexts, offering a wider platform to delve deeper into the mechanics-ethics interplay.

Moreover, game mechanics could be viewed in the light of individual differences among players. Future research should consider exploring how different game mechanics interact with individual characteristics like a player's moral philosophy,

personality traits, or cultural background, to shape their ethical decisions. This could not only enrich our understanding of ethical gameplay but also provide valuable insights for designing games that cater to a wide range of players.

Advanced research methodologies can also contribute to the understanding of how game mechanics affect ethical decisions over time. Longitudinal studies can provide valuable insights into how players' ethical thinking evolves with continuous gameplay, while experimental designs could shed light on how alterations in game mechanics can directly influence ethical gameplay.

The future of games is evolving, and so are the game mechanics with the advent of Augmented Reality (AR) and Virtual Reality (VR) games, creating immersive experiences like never before. The introduction of these novel platforms poses new ethical dilemmas and decision-making scenarios for players. It will be intriguing to observe how these advancements in game mechanics influence ethical gameplay in these environments.

In closing, this research marks a significant step towards understanding the intricate relationship between game mechanics and ethical gameplay. The hope is to inspire further scholarly discourse, enhance game design practices, and encourage the use of games as tools for moral reflection and learning. As technology advances, the rules of the game keep changing, and the exciting journey to discover how these changes impact ethical gameplay continues.

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