



A Qualitative Study on Justice and Fairness Perception Through Kohlberg's Theory using Video Games

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Abstract—This study explores how narrative-driven video games can enhance adolescents' moral reasoning, focusing on justice and fairness through Kohlberg's moral development theory. Addressing the challenge of fostering advanced moral reasoning in youth, it highlights the limitations of traditional methods and the potential of video games to immerse players in ethical dilemmas. Using a qualitative approach, 35 adolescents played a story-based video game and participated in interviews and group discussions. Thematic analysis revealed that 60% began with pre-conventional reasoning, emphasizing individual rewards, but many advanced to conventional reasoning (Stage 4) after gameplay. A smaller group (15%) demonstrated post-conventional reasoning (Stage 5), considering fairness and abstract principles. While 40% found moral options confusing, 11.43% formed emotional connections with the narrative, underscoring the role of storytelling in fostering empathy and reflection. The findings suggest that thoughtfully designed video games can bridge gaps in moral education, offering engaging contexts for ethical exploration. This research supports integrating such games into curricula to enhance moral and cognitive growth in adolescents.

Keywords: Narrative-Driven Video Games; Moral Reasoning; Justice; Kohlberg's Theory; Educational Tools

1. INTRODUCTION

In today's complex and interconnected society, a strong sense of justice and fairness is essential. Justice serves as a fundamental element in ensuring equal opportunities, fair treatment, and equitable outcomes for all individuals[1]. Without justice and fairness, societies face challenges such as unequal distribution of resources, mistreatment, and social unrest. The concept of justice and fairness is multifaceted, encompassing different ethical perspectives and theories. One perspective emphasizes individual rights and equal treatment, advocating the maximization of the good[2][3]. Conversely, utilitarian justice prioritizes achieving the greatest good for the majority, even at the cost of harm to some individuals[4][5].

Kohlberg's theory of moral development posits that justice represents the highest form of morality and emphasizes the importance of abstract reasoning as a core component of moral development. According to Kohlberg, the ability to reason morally requires individuals to think in terms of fairness for all parties involved[6]. His theory emphasizes the notion that a sense of justice and fairness is not innate, but can be cultivated through cognitive moral development. Furthermore, his framework asserts that fostering justice requires equitable access to social goods, such as income and wealth[7].

While academic research has extensively explored justice and fairness, popular media, including video games, cartoons, and films, also significantly influence individuals' moral reasoning and development. These media often feature characters who face complex moral dilemmas and offer audiences opportunities to reflect on their own values and principles[2]. For example, superhero films often depict protagonists struggling to balance the greater good with individual rights. Similarly, video games encourage players to make choices with significant ethical implications, allowing them to consider the consequences of their actions[8].

The interactive nature of video games makes them an effective medium for promoting moral reasoning. By immersing players in complex moral dilemmas, video games provide a simulated environment for exploring issues of justice and fairness in a dynamic and engaging way[9]. Some studies suggest that certain video games promote prosocial behavior and empathy, encouraging players to consider the welfare of others and the broader societal impact of their decisions[10]. In addition, the immersive quality of virtual environments allows users to engage in user-driven social narratives, further enhancing their moral development and ethical decision-making skills[11].

Despite the potential benefits, the impact of video games on moral development remains controversial. Research, such as that by Chaarani et al. (2022), highlights the cognitive benefits of video games for children but does not directly address moral reasoning [25]. Holl et al. (2020) focus on moral decision-making in video games, noting a lack of clarity in players' perceptions of ethical dilemmas [26]. Utami et al. (2023) apply Kohlberg's theory in non-interactive contexts, underscoring the need for studies that integrate interactive media with moral development frameworks [14]. Andrejević et al. (2020) explore fairness-related judgments but lack connections to gaming or interactive environments [23]. These gaps underline the necessity of research into how video games—particularly narrative-driven ones—can foster moral reasoning by engaging players in ethical scenarios.

The purpose of this study is to examine the impact of narrative-driven video games on shaping students' perceptions of fairness and to explore the relationship between justice and video games. Unlike prior studies, this



research uniquely integrates Kohlberg’s moral development framework into the gaming context, emphasizing how interactive storytelling fosters justice-oriented reasoning. By addressing gaps in existing literature, this study contributes to the development of educational tools that combine entertainment with moral growth. Furthermore, insights from this research aim to guide the design of video games as transformative platforms for teaching ethics and fostering empathy in adolescents.

2. RESEARCH METHODOLOGY

2.1 Research Framework

The methodological framework integrates elements of Kohlberg's moral theory and interactive media analysis. A visual representation of the research stages is provided in Figure 1 to illustrate the logical flow of activities, beginning with participant recruitment and ending with thematic analysis and interpretation of findings. Table 1 illustrates the structured interview questions used to elicit participants' perspectives on justice, fairness, and ethical decision making in video games.

Table 1. Interview Questions

No.	Question
1	What do you think about the story game the participants played previously?
2	Before the participants start playing this game, do you understand how the justice system works?
3	After playing this game, what is the participants' opinion on justice and fairness?
4	Are there meaningful choices that the participants made while playing the game?
5	What about this choice made it meaningful to the participants?
6	What do the participants consider while choosing options during the game?
7	Does the story in a game affect the decisions the participants make when playing?

This research examines how video game scenarios facilitate moral reasoning by using story-driven games as dynamic environments. These games provide participants with opportunities to engage with moral dilemmas that reflect the pre-conventional, conventional, and post-conventional stages outlined in Kohlberg's theory of moral development. The methodological framework integrates this theoretical perspective into the design of the study, emphasizing how empirical findings align with established concepts of justice and fairness. This integration ensures a holistic understanding of how interactive media foster moral growth and provides a solid foundation for analyzing adolescents' ethical decision-making in gaming contexts.

Research has shown that video games, particularly narrative-driven ones, have significant potential as tools for moral education. Titles like "The Last of Us" and "Detroit: Become Human" immerse players in complex ethical scenarios that foster empathy and critical thinking [2]. Studies by Holl et al. (2020) highlight the pivotal role of interactive storytelling in shaping moral judgment and decision-making processes [3]. Additionally, Ozer et al. (2020) emphasize that engaging narratives enhance players' comprehension of abstract ethical principles [4]. These findings strongly align with Kohlberg's theory of moral development, suggesting that thoughtfully designed video games can effectively cultivate higher-order moral reasoning in players.

2.2 Research Stages

This study uses a rigorous qualitative research methodology to examine the relationship between video games and adolescent moral development. The research begins with the recruitment and selection of 35 adolescent participants from diverse academic, gender, and age groups to ensure representativeness. Participants were selected based on their varied exposure to narrative video games, allowing for a comparative analysis of the impact of the games. Recruitment followed ethical protocols, including informed consent and participant and parental confidentiality agreements approved by an institutional ethics board.

Data collection involved multiple methods designed to comprehensively explore participants’ experiences and ethical reasoning during gameplay. The process began with gameplay observation, where participants engaged in a visual short story game crafted to present complex moral dilemmas. Observations captured their real-time decision-making processes and immediate responses to ethical challenges, providing valuable contextual insights into how participants navigated the game’s moral scenarios[12].

Following gameplay, structured group interviews were conducted to delve deeper into participants’ reflections and perspectives. These interviews focused on themes such as justice, fairness, and the moral implications of in-game decisions. The questions, detailed in Table 1, were designed to elicit thoughtful responses, uncovering participants’ understanding of the ethical dimensions presented in the game. This phase allowed researchers to gain a more nuanced view of their moral reasoning and the factors influencing their choices.

To supplement the data from observations and interviews, participants also completed brief written reflections. These reflective tasks provided additional layers of insight into their cognitive engagement and decision-making processes during gameplay. By integrating these reflections with observational and interview data, the study captured a comprehensive picture of participants’ moral reasoning within the context of the game.

The analysis process was conducted manually, involving a detailed review of interview transcripts and observation notes. Thematic coding was used to identify recurring themes and unique patterns, with a focus on concepts such as justice, fairness, and empathy. These themes were then compared with existing literature to interpret the findings and understand their implications for moral development and educational practices.

This structured approach, visualized through a research framework flowchart (Figure 1), underscores the systematic nature of the study, ensuring that each stage—from participant recruitment to the synthesis of findings—contributes to a holistic understanding of the educational potential of narrative-driven video games.

Thematic analysis is a widely recognized method for interpreting qualitative data, focusing on identifying patterns and themes within participant responses[13]. This approach is particularly effective for exploring perspectives and generating insights that align with research objectives. According to Naeem M et.al (2023), thematic analysis involves a systematic six-step framework: familiarizing oneself with the data, generating initial codes, identifying themes, reviewing themes, defining and naming themes, and producing the final report[14]. These steps ensure a structured and replicable analysis process, making thematic analysis a suitable choice for examining moral reasoning within the context of video games.

In this study, thematic analysis was employed to uncover core themes such as justice, fairness, and empathy. The analysis also accounted for moderating factors, including participants' age, gender, and gaming experience[15]. A comparative approach was used to explore differences between individuals with extensive gaming exposure and those with limited or no prior experience. Synthesized findings were then analyzed in relation to existing literature, identifying both gaps and the unique contributions of this research. Additionally, the results were contextualized within broader frameworks of moral development and the educational potential of interactive media, highlighting the nuanced impact of narrative-driven video games on participants' ethical reasoning and decision-making processes.

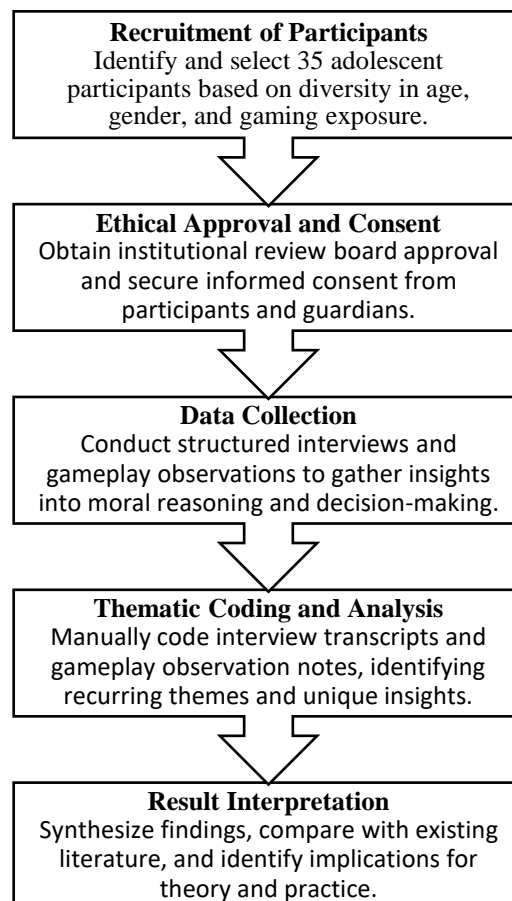


Figure 1. Research Framework Flowchart

3. RESULT AND DISCUSSION

3.1 Participant Engagement with Game Scenarios

The study included 35 university freshmen participants, comprising 11 women and 14 men with an age range of 17 to 20, drawn from two distinct classes. The participants engaged in a visual short story game with choices and a matching game for approximately 20 minutes. The narrative of the game revolved around a male protagonist



who had stolen his stepmother's necklace from her. In the game, participants played a judge in their son's court case. After playing, they were interviewed by groups about their perceptions of justice and fairness in the game and their decision-making process as the judge. The interviews yielded insights into their experiences and perspectives.

Participants showed varying levels of engagement with the visual short story game. Insights from the group interviews revealed different perspectives: Confusion and Indifference: Approximately 40% of participants reported confusion about the game's options, expressing uncertainty about which choices were "right". In addition, 20% felt that the game's storyline was exaggerated and unrealistic for a courtroom scenario. Emotional connection: A minority of participants (11.43%) empathized with the protagonist, expressing that his stepmother overreacted to the theft given the sentimental value of the necklace. One participant remarked, "The necklace is his birth mother's legacy; the stepmother should give it to him. Casual interest: A remarkable 22.85% treated the game purely as entertainment, randomly choosing options and trying to finish quickly.

Table 2. Illustrates the thematic analysis of participant engagement

Engagement Type	Percentage	Representive Quotes
Confusion	40%	“They feel confused while playing the game.”
Emotional Connection	11.43%	“The necklace is his birth mother's legacy.”
Casual Interest	22.85%	“They choose options to finish quickly.”

3.2 Evolution of Moral Reasoning

After interviewing participants, it became clear that their perceptions of justice changed significantly after playing the game. Before playing, participants' views were largely consistent with Kohlberg's pre-conventional level, with 60% associating justice with individual rights and opportunities (Stage 2) and 25% emphasizing deserved rewards or punishments (Stage 1)[16]. After playing the game, many participants began to associate justice with adherence to rules and laws, reflecting a shift toward the conventional level, particularly Stage 4, where maintaining social order and understanding societal rules becomes important[17]. A significant number also recognized that actions are influenced by personal motivations, suggesting an emerging awareness of post-conventional reasoning in some participants as they grappled with justice as fairness and individual circumstances (Stage 5)[18]. A smaller group expressed empathy for the protagonist, emphasizing the role of injustice in creating moral dilemmas.

Participants identified key moments in the game that they found meaningful. The decision moments-such as the choice between resolving the problem through family reconciliation or declaring guilt-were widely perceived as impactful. This suggests that these moments challenged participants' sense of justice and pushed those at Kohlberg's conventional level (Stage 4) to consider the societal implications of their decisions. Many participants also noted their interest in the tension between "truth revealed" and "justice upheld," reflecting an early engagement with postconventional reasoning (Stage 5) as they weighed abstract principles such as fairness and individual circumstances[19]. The influence of the narrative was a key factor in shaping participants' decisions. All groups agreed that the game's story played a central role in their moral reasoning. The protagonist's backstory and ethical dilemmas were frequently cited as factors that influenced decisions, highlighting the power of interactive narratives to foster empathy and engagement[20]. As some participant noted, "It was interesting to see how the story changed based on my choices. This demonstrates the game's potential to encourage Stage 3 reasoning in some participants, as they considered the impact of their choices on relationships within the narrative[21]. In addition, the narrative climax empowered participants to grapple with moral dilemmas, providing an opportunity for those in Stage 4 to reflect on rules and order, while nudging others toward higher levels of abstraction and fairness.

Table 3. Group Discussion Rubrics

Indicator	Criteria	Rating Scale (1 = Low, 5 = High)			
		Group A (8 participants)	Group B (8 participants)	Group C (8 participants)	Group D (11 participants)
Active Participation (1 = Only a few members contribute; 5 = All contribute actively.)	Percentage of group members contributing to discussions.	4	4	5	4
Depth of Discussion (1 = Basic responses; 5 = responses; 5 = reflective answers).	Level of reasoning in participants' responses (superficial vs. reflective answers).	3	3	2	4



Indicator	Criteria	Rating Scale (1 = Low, 5 = High)			
		Group A (8 participants)	Group B (8 participants)	Group C (8 participants)	Group D (11 participants)
Deep ethical reflections.)					
Narrative Engagement (1 = Rarely mentioned; 5 = Frequently cited.)	Degree to which participants refer to story elements in their reasoning or debates.	4	3	3	4
Consensus Building (1 = No consensus; 5 = Active, respectful deliberation.)	Group’s ability to reach agreement or explore diverse perspectives collaboratively.	3	3	4	4
Emotional Involvement (1 = No visible emotion; 5 = High emotional involvement.)	Observable emotional reactions (e.g., sympathy, frustration) tied to game decisions or narrative.	4	3	2	4
Decision-Making Styles (1 = Mostly impulsive; 5 = Thoughtful and deliberate.)	Nature of decision-making (e.g., rational, emotional, impulsive).	4	3	2	4

3.3 Influence of Narrative and Choices

There were also significant differences in the approaches to decision making among the participants. Fun and curiosity drove 60% of participants, who made impulsive choices or explored the narrative without deeper reflection, primarily in line with preconventional thinking (Stage 2)[22]. Meanwhile, 20% expressed narrative curiosity, choosing options to uncover alternative storylines, reflecting an early transition to Stage 3, where interpersonal dynamics and understanding of relationships come into play. For 15%, ethical reflection influenced their choices, as they consciously considered the moral and narrative implications, indicating emerging level 5 reasoning. A small group engaged in subversive play, deliberately choosing "wrong" options to explore unconventional outcomes. While some of these choices were made for fun or curiosity, others reflected a deeper engagement with the moral framework of the game. These participants demonstrated a willingness to challenge societal or narrative norms and explore the broader ethical principles behind their choices. Such behaviour is consistent with the early stages of postconventional thinking described by Kohlberg, in which individuals critically evaluate rules and societal expectations in order to prioritize abstract principles such as fairness and justice. By challenging the dichotomy of "right" and "wrong," these participants demonstrated creativity and the beginnings of abstract reasoning, hallmarks of higher-order moral development[23]. These findings underscore the effectiveness of narrative-driven games in engaging participants and encouraging reflection, even when approached casually. Integrating Kohlberg's theory, it becomes clear that the game facilitated movement through different stages of moral reasoning, providing a scaffolded experience for participants to explore justice and ethical decision-making.

Table 4. Thematic Analysis

Theme	Sub-Theme	Examples from Data
Engagement with Game	Confusion	"They feel confused while playing the game."
	Indifference	"They think the case is too exaggerated to bring to court."
	Emotional Connection	"They feel sympathy for the man stealing his stepmother’s necklace."
Perception of Justice	Justice as Rights	"Justice is all of people can take their own rights and their chance."
	Justice as Fairness	"Justice is for no one to be disadvantaged, and nobody is benefited."



Theme	Sub-Theme	Examples from Data
Impact of Game Choices	Justice as Punishment/Reward	"True will be praised, the false will get punished."
	Meaningful Choices	"Deciding who was guilty or resolving the issue through family."
	Enjoyment of Narrative Outcomes	"Seeing different story outcomes was interesting."
Considerations in Decision-Making	Playing for Fun	"They choose options whatever they want."
	Curiosity	"Wanting to see what will happen next while choosing the option."
	Subversion	"Choosing what they think is 'wrong' just for fun."
Influence of Narrative	Consensus on Influence	"All participants agreed the story affected their decisions."

3.4 Discussion

This study highlights the significant influence of narrative-driven video games on adolescents’ moral reasoning and sense of justice. By engaging players in reflective decision-making and discussions, these games demonstrate the potential to enhance empathy and intellectual engagement, fostering moral development through interactive storytelling.

A central theme was the critical role of narrative in shaping moral decisions. Participants formed emotional connections to the protagonist’s backstory, such as the theft of a sentimental family necklace, which influenced their judgments. Understanding the protagonist’s motives fostered empathy, as one participant observed, “The story made me think about what I would do in that situation.” This underscores how immersive narratives personalize abstract ethical concepts, encouraging players to evaluate their values[24]. Such findings align with research indicating that emotionally engaging stories promote deeper moral reflection.

Participants exhibited notable progression in moral reasoning. Initially, many held simplistic, rule-based perspectives reflective of Kohlberg’s pre-conventional stage. However, through gameplay, their reasoning evolved to consider context and fairness, signaling shifts toward conventional and post-conventional stages. One participant remarked, “It’s not always clear who’s right or wrong, and sometimes you have to look deeper into the situation,” reflecting more nuanced, principled judgments[25].

The interactive nature of the game was pivotal, offering players agency in ethical exploration. Many deliberately tested unconventional outcomes, engaging in “subversive play” to challenge societal norms and moral boundaries. This exploratory approach fostered critical thinking and creativity, hallmarks of advanced moral reasoning. However, challenges emerged: 40% of participants cited confusion about moral options, emphasizing the need for clearer narratives and instructions to sustain engagement. Additionally, some treated the game casually, valuing entertainment over reflection, highlighting the importance of balancing design to engage diverse audiences[26].

These findings align with prior research emphasizing the role of narrative-driven games in enhancing empathy and moral reasoning. For instance, B. Chaarani (2022) highlight the potential of well-designed games for positive developmental impacts[27]. Yet, as Holl. E (2020) notes, games also pose ethical challenges, requiring careful design to avoid moral disengagement[28]. This study bridges a critical gap by integrating Kohlberg’s theory into gaming contexts, addressing the underexplored intersection of moral education and interactive storytelling. The analysis revealed key patterns:

- a. Narrative Influence: The narrative was universally impactful, shaping participants’ decisions and challenging their moral frameworks[29]
- b. Evolving Justice Perceptions: Participants shifted from rigid, rule-based views to nuanced perspectives, incorporating fairness and empathy.
- c. Decision-Making Diversity: Styles ranged from impulsive choices to reflective ethical explorations, showcasing the game’s versatility in engaging moral reasoning.
- d. Engagement Variability: While some participants connected deeply with the narrative, others experienced confusion or treated the game as casual entertainment[30].

These findings have significant implications for game design, particularly in educational contexts. To maximize the potential of narrative-driven games as tools for fostering moral reasoning, designers should:

- a. Develop branching storylines that present players with rich, context-sensitive dilemmas, encouraging them to consider multiple perspectives[31].
- b. Incorporate dynamic feedback systems that illustrate the consequences of players’ choices, enhancing reflection and learning.
- c. Address engagement gaps by integrating scaffolding mechanisms, such as guided prompts or reflective moments, to support players in navigating complex ethical scenarios[32].



Future research should explore the integration of such games into classroom settings and extracurricular programs, where they could serve as interactive platforms for teaching ethical concepts. To enhance their effectiveness, designers must carefully balance narrative depth with clarity. A compelling story is essential to engage players emotionally and sustain their interest, yet overly complex or confusing narratives risk alienating players, as highlighted by participants in this study. Many reported feeling confused by unclear moral frameworks or rushed to complete the game, which limited their reflection on its ethical dilemmas.

To address these challenges, game developers should prioritize coherent storytelling and relatable scenarios while maintaining the complexity necessary to provoke critical thinking. Providing clear instructions, intuitive gameplay, and structured reflective prompts could help mitigate confusion and encourage players to engage more deeply with the narrative. By balancing entertainment with educational depth and accessibility, narrative-driven games can foster empathy, critical thinking, and moral development, empowering adolescents to grapple dynamically with ethical challenges.

This study demonstrates that, when thoughtfully designed, video games have the potential to transcend their entertainment role, becoming transformative tools for personal growth and moral insight.

4. CONCLUSION

This study highlights the transformative potential of narrative-driven video games in promoting moral education and cognitive development. By immersing players in emotionally engaging and ethically complex scenarios, these games encourage reflection on justice, fairness, and personal values. Findings revealed a range of participant engagement, from deep ethical reflection to casual play, demonstrating both the versatility and challenges of this medium. In addition to fostering empathy, interactive storytelling supported the development of higher-order moral reasoning, consistent with Kohlberg's stages of moral development. Despite the apparent emotional and intellectual engagement, challenges such as confusion and diverse motivations among participants highlight the importance of thoughtful design to ensure accessibility and impact. As video games continue to evolve, their integration into educational settings holds great promise. With a balance of narrative depth, interactivity, and relatability, these games can serve as powerful platforms for moral growth, helping players navigate the complexities of ethical decision-making. Addressing design challenges and improving clarity will optimize their educational value. Future research should delve deeper into this intersection and explore innovative approaches to harnessing the educational potential of video games. In doing so, video games can move beyond entertainment and become powerful tools for personal growth and meaningful moral development.

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