

Mirrored Morality: An Exploration of Moral Choice in Video Games

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Abstract

This exploratory study was designed to examine how players make moral choices in video games and what effects these choices have on emotional responses to the games. Participants ($n=75$) filled out a moral foundations questionnaire (MFQ) and then played through the first full act of the video game *Fallout 3*. Game play was recorded and content analyzed for the moral decisions made. Players also reported their enjoyment of and emotional reactions to the game and reflected on the decisions they made. The majority of players made moral decisions and behaved toward the nonplayer game characters they encountered as if these were actual interpersonal interactions. Individual differences in decision making were predicted by the MFQ. Behaving in anti-social ways did increase guilt, but had no impact on enjoyment.

Introduction

IN RECENT YEARS, moral judgment tasks have served as an increasingly popular plot mechanism in video game play. As a result, a unique opportunity in media and communication research has emerged. Although moral judgments are regularly featured in other media formats, such as film and television, in these formats, the viewer is simply an observer and evaluator of the choices made.¹ In video games, the player becomes the moral actor. The goal of the present study was to further develop our understanding of how players make moral decisions and what effects those decisions have on emotional responses to video games.

Existing research indicates that conceptions of morality may guide game decisions in some contexts,² but not others.³ Perceptions of characters and events within video games appear to be an essential part of whether individual game players consider game decisions to be moral and whether individuals use personal moral codes to guide those decisions. Previous research suggests that the default cognitive bias is to perceive video game characters not as objects, but as social entities for whom morality would apply.⁴⁻⁶ By anthropomorphizing objects in video games, individuals may approach the mediated representations, including the developed characters and scenarios, as believers, that is, users may not engage in the efforts necessary to override the automatic social perceptions created through the anthropomorphizing process to identify the characters as make-believe, partly because it requires additional cognitive effort.⁷ Additionally, players often do not want to be reminded that the content is

not real to maintain the suspension of disbelief necessary to become involved in the narrative and identify with the characters.⁸ Moral decisions have also been conceptualized as automatic social processes,⁹ which indicates that moral frameworks should guide in-game decisions in which the player acts as a believer.

This hypothesis, however, seems at odds with the observation that immoral conduct (i.e., violence and theft) is at the heart of many enjoyable and popular video games. Hartmann and Vorderer³ conceive of moral disengagement, especially with violent video games, as a process by which a player suspends moral judgment of their own actions, which is necessary to ease feelings of guilt and increase enjoyment. To overcome the cognitive bias toward moral judgment in this context, moral disengagement requires either specific cues in the game or a conscious moral rationalization by the game player that confirms the belief that this is just a game.¹⁰ Because of the cognitive effort involved in the conscious rationalization,⁷ game cues such as the completion of tasks to advance or the dehumanization of targets take on greater importance for disengagement to occur.

Games that present players with explicit moral decisions represent an interesting case where these disengagement cues are typically absent, and the player is clearly the moral actor. Immoral behavior is possible in these scenarios, but the moral disengagement necessary to make such behavior an appropriate or acceptable choice would require the sort of conscious rationalization that the research above suggests is unlikely. Players in these kinds of games may be unable to maintain a detached and unaffected psychological state,

which would suggest that the player's moral compass will play an important role in determining the decisions which are made.

If moral disengagement does not occur, then how will in-game decisions be made? Haidt and Joseph's moral foundations theory (MFT) provides some direction here.⁹ Taking a social intuitionist perspective, the MFT consists of five distinct and universal psychological systems that innately exist, at varying levels, across individuals and cultures. These five foundations include harm/care, fairness/reciprocity, authority/respect, ingroup/loyalty, and purity/sanctity. In a mediated context, Tamborini¹¹ has proposed that the relative salience of these moral foundations should influence (a) enjoyment of media content in which one of the foundations are violated, and (b) decision-making in interactive media that involve violating one of the foundations. Indeed, Joeckel et al.¹² found that moral salience could influence game decisions for some players. Given the above, the following hypotheses were proposed:

H1: When a video game presents explicit moral choices, a player's moral intuition will guide these choices.

H2: The relative salience of moral foundations will influence the types of moral decisions made within the game.

If real-world moral codes are implemented in video game decision making, then it can be assumed that these moral choices have some impact on overall feelings of guilt and enjoyment in the game. As media consumers, individuals experience enjoyment and emotional reactions to characters that are in part regulated by morality.¹³ Hartmann et al. found that players forced to violate morals during game play experienced increased feelings of guilt.¹⁴ In this case, when personal moral values are even more salient in the decision-making process, we proposed the following hypotheses:

H3: When a player behaves morally within the game environment, enjoyment will be higher than when the player violates his/her moral codes.

H4: When a player behaves morally within the game environment, guilt will be lower than when the player violates his/her moral codes.

Method

Participants

Undergraduate participants ($n=75$) were recruited from classes at a large Midwestern University to participate in this study in exchange for extra credit. The age of participants ranged from 18 to 24, with 40 men and 35 women. Participants reported playing video games an average of 7.5 hours per week, with 68 percent of the sample reporting at least 2 hours per week of gameplay.

Measures

Participants reported demographic information (age, sex, and race), general media use, and video game use. The initial questionnaire also included the 30-item Moral Foundations Questionnaire (MFQ).¹⁵ Reliabilities for each subscale of the

MFQ were care ($\alpha=0.77$), fairness ($\alpha=0.82$), loyalty ($\alpha=0.80$), authority ($\alpha=0.76$), and purity ($\alpha=0.82$). Several additional personality scales (e.g., extroversion) were included as dummy measures to help conceal the purpose of the study.

After game play, participants completed a second questionnaire to assess their reactions to the game. There was a three-item measure of enjoyment¹⁶ answered on a five-point scale, with an $\alpha=0.93$. Participants' guilt was assessed with a two-item measure¹⁷ also using a five-point scale, $\alpha=0.78$.

Because of the exploratory nature of this study, we asked participants, "did you feel you made good moral decisions in this game?" with the open-ended followup of "why did you make the choices you did?" They were also asked, "if you were to go back and play the game again, would you make the same choices?" along with the open-ended question of "why or why not?"

Materials

The game *Fallout 3* for Xbox 360 was used to gauge moral choice in this study. *Fallout 3* was originally released in 2008 by the Bethesda Game Studios and has since received widespread critical acclaim. Participants played through the first act, which was chosen as the stimulus for several reasons. As part of the story, the player is led through both character building and training in the controls, so an external training session was unnecessary. This early stage also provides some back-story and a somewhat linear progression, although the player is free in many spots to explore and interact with the environment as he or she wishes. Most importantly, this first act involves several both explicit and implicit moral choices that the player must make.

Procedure

During recruitment, participants were told that this was a study on video game enjoyment, and they were asked to schedule a time to come to a game lounge on campus. Upon arrival, participants provided informed consent and then filled out the initial demographic, media use, and personality questionnaire. Participants then were seated in the lounge in front of a large-screen television to play the first act of the game *Fallout 3* on Xbox 360. The participants were allowed to play at their own pace, although most players finished the act in about 30 minutes. The entire gameplay session was recorded directly from the console to DVD. Participants were free to ask the attendant running the study for help if they got stuck, but they primarily played alone and were unobserved other than the DVD recording. After the completion of the first act, they then filled out a questionnaire asking about their enjoyment and emotional reactions to the game, and then completed a set of questions asking specifically about the moral choices made within the game.

Coding

Three graduate students were trained to code the recorded gameplay on a variety of dimensions. There were 17 interactions during the course of the first act in which the player had an explicit choice between a social (e.g., polite and friendly), antisocial (e.g., bullying and hostile), and neutral response or act. The choices made in each of these interactions were clearly visible onscreen and were recorded by the

coders. The coders also recorded the number of times during the course of play that the player engaged in unprovoked aggression or theft. Both assault and theft were possible courses of action for the player throughout the first act, although these were not presented as explicit choices in the same way that the above interactions were. Reliability was run on 25 percent of the sample, which was coded by multiple coders, and there were no disagreements in coding decisions owing to the straightforward nature of observing the onscreen choices.

Results

To address the first hypothesis, we examined several descriptors of how and why players were making the choices they did. Of the 17 interactions mentioned above, 61.3 percent ($n=46$) of the players in this sample did not make a single antisocial choice. A much smaller group, 13.3 percent ($n=10$) of the sample, behaved antisocially the majority of the time (in over half of the interactions). Although the game allowed for open-ended exploration and interaction with characters, and the player was equipped with fighting tools (fists or a gun), just 4 percent ($n=3$) of the sample engaged in unprovoked aggression. Just 6.7 percent ($n=5$) of the sample attempted theft. There were two scenes in the opening act where participants were provoked and had an opportunity to respond with aggression. Despite aggression being justified and accessible in these cases, over half of the participants (52 percent, $n=39$) chose not to engage in violence in either case, attempting instead to reason with the perpetrators.

Participants' reflections on their decisions in the game also provide some insight about their approach. Most players (77.3 percent, $n=58$) said that they felt that they made moral decisions while playing the game. Participants' open-ended responses were coded for three possible motivations/rubrics for decision-making: related to real-life (either making decisions the way they would in real-life or purposely choosing what they would not do in real-life), curiosity, and game strategy. The majority of players (68 percent, $n=51$) described themselves as making the same kinds of decisions they would in real life. Only two players (2.7 percent) made choices, because they were different from real life. Just 20 percent of the sample ($n=15$) mentioned strategy as a motivator for their decision making, and 12 percent ($n=9$) mentioned curiosity as a reason they made the choices they did. Thus, in these exploratory analyses, when looking at both the choices themselves and at the player's recounting of the choices, the majority of players seemed to treat the decisions in this game

TABLE 2. PREDICTORS OF MORAL CHOICES FAVORING AUTHORITY

Variable	B	SE B
Constant	1.58	0.38
Care subscale	0.12	0.09
Fairness subscale	0.02	0.09
Ingroup subscale	-0.09	0.09
Authority subscale	0.33**	0.10
Purity subscale	-0.06	0.09
R ²	0.19	
F	3.17*	

$n=75$.

* $p < 0.05$, ** $p < 0.01$.

much like they would in real life. These findings are consistent with H1.

H2 allowed for a more analytical test of the relationship between actual moral choices and the decisions made in the game. Here we proposed that the relative salience of moral foundations would influence the types of moral decisions made within the game. There were two foundations that factored in to various decisions made during game play. First, there were several interactions where harm/care was clearly a consideration. Second, authority was emphasized in the narrative of the game and several decisions required the player to either adhere to or reject authority. Each player's responses to these sets of decisions were averaged to create two dependent variables: level of care and level of obedience. Two regression analyses were run with each of the five moral foundations entered as predictors. The first regression shows that the moral foundations of care and fairness significantly predicted the level of care exhibited by the player [$F_{\text{change}}(5, 66) = 4.90, p < 0.001$; see Table 1]. The second regression shows that the moral foundation of the authority significantly predicted the deference to authority exhibited by the player in the game [$F_{\text{change}}(5, 66) = 3.17, p = 0.01$; see Table 2]. Thus, H2 was supported.

H3 predicted that enjoyment would be higher, and H4 predicted that guilt would be lower when a player behaved morally. An independent-sample t -test was conducted to compare means for the dependent variables, enjoyment, and guilt, between those who did not behave antisocially and those who did. There was not a significant difference in the enjoyment scores for those who were antisocial ($M = 2.00, SD = 0.93$) and those who were not ($M = 1.77, SD = 0.92$), $t(73) = 1.06$,

TABLE 1. PREDICTORS OF MORAL CHOICES FAVORING CARE

Variable	B	SE B
Constant	1.32	0.27
Care subscale	0.12*	0.06
Fairness subscale	0.17**	0.06
Ingroup subscale	-0.05	0.06
Authority subscale	0.07	0.07
Purity subscale	-0.08	0.06
R ²	0.27	
F	4.90**	

$n=75$.

* $p < 0.05$, ** $p < 0.01$.

TABLE 3. CORRELATION MATRIX FOR MORAL FOUNDATIONS QUESTIONNAIRE SUBSCALES, ENJOYMENT, AND GUILT

	Care	Fairness	Loyalty	Authority	Purity	Enjoyment	Guilt
Care							
Fairness	0.55**						
Loyalty	0.22	0.27*					
Authority	0.17	0.22	0.52**				
Purity	0.23*	0.24*	0.53**	0.58**			
Enjoyment	0.01	0.05	0.06	0.13	0.09		
Guilt	0.02	0.10	0.01	0.06	-0.16	0.03	

$n=75$.

* $p < 0.05$, ** $p < 0.01$.

$p=0.29$. Thus, H3 was not supported. There was, however, a significant difference in the guilt scores between antisocial ($M=0.98$, $SD=0.77$) and social groups ($M=0.65$, $SD=0.47$), $t(73)=2.28$, $p=0.03$, which supports H4. To further explore the relationship between enjoyment and guilt, we ran a simple correlation between the two. The relationship was not significant, $r=0.03$, $p=0.82$. See Table 3 for a correlation matrix between the MFQ variables, enjoyment, and guilt.

Discussion

As moral choices are increasingly utilized as plot devices in video games, they present a unique opportunity to examine the underlying factors involved in moral decision making. This exploratory study indicates that moral decisions in games largely play out the same way that moral judgments in real-world interactions would. The suspension of disbelief that has long been a feature of fictional entertainment consumption occurred in this game context as well, with players often interacting with nonplayer characters as if they were real people, experiencing the same emotions (e.g., guilt) that they would feel in actual interpersonal interactions. In this study, we found that not only did most players avoid antisocial behavior, but they cited moral considerations for their behavior. Although a subset of the sample did describe their choices in strategic terms, moral disengagement was not typical in this context when a player was given moral agency.

We found further support that moral judgments made in the game world reflect those in the real world by the individual differences that emerged in the patterns of choices. MFT has been a successful predictor of individual moral choices in that the relative salience of the foundations plays an important role in the decisions made.⁹ This theory was supported here in a game context as well. If most players were playing strategically or were driven by other ludic motivations (e.g., a desire to experience other personas independent of their own), then the salience of one's moral foundation would have little utility in predicting decision-making. Given that moral foundations were a significant predictor here in the expected directions, we can assume some transfer of one's real-world moral decision-making into the game environment.

Further evidence for a suspension of disbelief in the game context was found in guilt elicited by game play. Consistent with the findings of Hartmann et al.,¹⁴ we found that those who made antisocial choices during game play reported feeling more guilt at the conclusion of the game than those who behaved morally. If players were not morally engaged or actively identifying with the characters and reacting to them as if they were real people, then there would be little reason to feel guilt for their choices.

This guilt, however, did not translate to reduced enjoyment. Further research is necessary then to unpack the relationship between guilt and enjoyment in this case, where our actions might cause us to feel guilt, but enjoyment of the experience remains the same. It is also worth noting that such an experience could have important prosocial effects. If a player has moral agency and feels guilty for a certain behavior or choice, a certain level of conscious consideration of the repercussion of one's behavior is implied. Games could provide an important outlet for not only making moral decisions, but also reflecting upon (and perhaps mentally rehearsing) what the right choices and behaviors are.

Although this study is confined to a single gameplay session, certainly the decisions made could change with repeated gameplay or further immersion into the narrative. Given the findings of this study, a fruitful area of future research would involve further examination of the conditions in which moral presence within the game world occurs. For example, what is the role of narrative in moral disengagement? For most players, moral disengagement did not occur in this study, but if a game's narrative required becoming a character with a different moral framework, and the player became immersed in that narrative, would that be enough to cause them to make moral decisions in a different way?

It is also worth noting that the sample in this study was limited to 18–24-year-old participants. Although this is an interesting age group given the targeting of video games by developers to this specific demographic (especially for the genre of video games likely to include moral decision-making), clearly moral salience is something that could vary over the course of one's lifespan. Joeckel et al., for example, found that salience of moral foundations was not a significant predictor of decision making for American adolescents (although it was for German adolescents).¹² Thus, further consideration of developmental differences is a worthwhile avenue for future research.

Although this study is just a first step toward a deeper understanding of moral decision making in games, it illustrates the promise of using games to study moral choice. If games are to give us some insight into real-world moral behaviors, a sense of moral agency and moral engagement/suspension of disbelief within the game world is necessary. Every indication in this study is that the majority of players have a strong moral presence within the game environment and do not make decisions as if it were just a game. This opens the door for future studies that could take our understanding of the factors that might increase or decrease moral presence both in games and beyond to a much deeper level.

Author Disclosure Statement

No competing financial interests exist.

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