
Theses, Dissertations, and Projects

2015

"I could never do that in real life" : an exploration of real world morality and moral decision-making in role-playing video games

Samuel E. Flescher
Smith College

Follow this and additional works at: <https://scholarworks.smith.edu/theses>



Part of the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Flescher, Samuel E., "I could never do that in real life" : an exploration of real world morality and moral decision-making in role-playing video games" (2015). Masters Thesis, Smith College, Northampton, MA. <https://scholarworks.smith.edu/theses/652>

This Masters Thesis has been accepted for inclusion in Theses, Dissertations, and Projects by an authorized administrator of Smith ScholarWorks. For more information, please contact scholarworks@smith.edu.

Samuel Eder Flescher
“I could never do that in
real life”: An exploration
of real world morality and
moral decision-making in
role-playing video games

ABSTRACT

Video games as a medium for play increase in popularity and participation every year. Around the world, video games are also constantly criticized for depicting violent, gratuitous, and potentially immoral material that consumers can engage in. Yet very little evidence exists suggesting a tangible connection between individuals’ real world thoughts and actions with their in-game experiences. This mixed-methods study aimed to explore the potential relationship between individuals’ real world moral identities with their virtual decisions and actions in single-player role-playing video games. Fifty-one people completed an online survey containing qualitative and quantitative questions. Participants provided narrative accounts of in-game decisions and experiences they engaged in, as well as completed the Moral Foundations Questionnaire assessing their personal moral identities. Findings of this study showed that a relationship did exist between participants’ assessed moral identities and how they engaged with single-player role-playing video games. The findings also presented common themes throughout participants’ narratives such as self-consistency, “it’s a game,” resetting, and five moral foundations, as well as correlations between individuals’ assessed morality and preferred in-game moral play styles. This study concludes with implications for how these connections can be addressed in social work practice with individuals who actively engage in frequent video game play.

**“I COULD NEVER DO THAT IN REAL LIFE”:
AN EXPLORATION OF REAL WORLD MORALITY AND
MORAL DECISION-MAKING IN ROLE-PLAYING VIDEO GAMES**

A project based upon an independent investigation,
submitted in partial fulfillment of the requirements
for the degree of Master of Social Work.

Samuel Eder Flescher

Smith College School of Social Work
Northampton, Massachusetts 01063

2015

ACKNOWLEDGEMENTS

There are a few people I would like to thank for supporting me through the thesis process. This completed thesis is only possible because of their aid and support.

First, I would like to thank all of the gamers who participated in my study, as well as the Reddit community, for engaging with my thesis topic and being willing to explore their experiences with me. Their involvement and stories are what really brought this thesis to life.

I would like to thank my friends and family for being there for me and making the difficult days not so bad. I want to thank my friends for the time they shared helping me perfect this study. I want to thank my family for supporting me and believing in me no matter what crazy ideas I came up with.

I wish to thank Smith College and all of the individuals who worked with me to get to this point. Thank you to Katie Newkirk, who helped me shape my idea into a real social work thesis topic. Thank you to my research class who took my ideas seriously and helped me figure out where to go with my thoughts. Especially thank you to my thesis advisor, Mary Beth Averill, whose sage council was instrumental to finding my voice and making this the best thesis it could be.

Finally, I want to thank Aly for sticking with me through this long and stressful time in our lives. Your love and support means the world to me, and my life would be infinitely less wonderful without you beside me.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	ii
TABLE OF CONTENTS	iii
CHAPTER	
I INTRODUCTION	1
II LITERATURE REVIEW	4
III METHODOLOGY	18
IV FINDINGS	27
V DISCUSSION	38
REFERENCES	52
APPENDICES	
Appendix A: Moral Foundations Questionnaire	55
Appendix B: Informed Consent	57
Appendix C: Survey	60
Appendix D: Participant Recruitment Letter	77
Appendix E: Smith College School of Social Work HSR Approval Letter	78
Appendix F: Tables	79

CHAPTER I

Introduction

The purpose of this study is to determine if and in what ways an individual's morality and understanding of her or his own morality is related to that player's moral play choices in single-player role-playing video games. Video game playing as a hobby for children and adults increases in popularity and participation every year. Gamers collectively spend thousands of hours playing video games each year (Khoo, 2012). The growing numbers of people who partake in this particular medium, and the continually expanding nature of video game use within American culture, necessitate the attempt to understand the ways virtual experiences within video game worlds relate to real world identities and mental health.

For the purposes of this study, the operational definition for *morality* is a system of beliefs and principles of conduct held by an individual to guide her or him through decisions individually, culturally, or socially perceived as inherently good or bad (Gert, 2012). The acronym *RPG* stands for Role-Playing Game, and for the purposes of this study it will solely indicate single-player role-playing video games. *Single-player role-playing video games* are virtual stories played on a computer or video game console in which an individual plays alone without other human players, and that individual assumes the role of a character she or he has created within the virtual world. The term *moral play choice* is a narrative decision point during a video game in which the player is asked to be either helpful or harmful to other in-game characters. *Assessed morality* indicates participants' morality scores determined by a quantitative

morality measurement index, while *perceived morality* indicates participants' own recorded understandings of their moral identities.

Within the last 15 years, many role-playing video games have incorporated systems where players achieve branching stories and consequences through diverging moral choices they are required to make during their play. This study will examine if and how individuals' accounts of their general play styles in terms of moral choices in RPGs are connected to their own internalized morality. Do players with more advanced moral identities make fewer immoral choices during play? Do players with less moral maturity make more immoral choices? Are these choices relatively consistent with a player's internal moral belief system, antithesis to internalized morals, or completely unrelated? What feelings are elicited when players make moral or immoral choices? What if a player is forced to make an immoral choice as part of the gameplay?

Though previous studies exist discussing morality in video games, these studies have generally focused on guilt responses to forced immoral choices in video games (Hartmann, et al., 2010; Hartmann & Vorderer, 2010; Weaver & Lewis, 2012) or were concrete experiments about how particular moralized gameplay influenced individuals (Greitemeyer & Osswald, 2010; Khoo, 2012). My mixed-methods exploratory study will focus on players' own descriptive accounts and perceptions of their moral choices. Players will describe moral experiences they have had in RPGs, and what emotions and reactions these situations elicited. By recording participants' descriptive narrative accounts, players' own perceptions of their choices in RPGs and whether these perceptions are connected to their assessed internalized morality will be evaluated. My study will contribute to current knowledge by analyzing the relationship between

moral choices and internalized moral foundations, and analyzing players' own accounts and comprehension about their morality and moral play.

This study will be organized in five chapters. Following the introductory first chapter, the second chapter of this study will present a comprehensive review of the literature related to morality and video game play. Chapter 3 will provide the methodology for the experiment carried out for this study, including the instruments used, the chosen participation population, and potential limitations. Chapter 4 will present the findings and correlations determined by analyzing the results gained from the measurement instruments. The final chapter will elaborate on the findings and their potential meanings, as well as discuss the implications for this study.

This study is intended to assist clinicians and video game consumers in understanding how an individual's moral identity relates to her or his decision making in RPG storylines. The information collected through this study could have valuable social and clinical ramifications. The implications of this study could offer insights into ways video games act as reflections of players' preexisting morality, and how players' moral traits interact with their video game play. As video game play becomes more immersive and ubiquitous, clinicians may specifically benefit from understanding the relationship of virtual moral choices to their clients' real world moral understandings and moral identities. The video game industry will continue to grow, and mental health professionals must learn to value the significance games may have for many of their clients.

CHAPTER II

Literature Review

The increasing pervasiveness of video game play means that more research should be done into how video game experiences interact with individuals' real lives. Role-playing video games are interactive virtual entertainment in which players assume the role of a character in a generally fictional virtual environment. In role-playing video games, individuals are able to make their own choices about their characters' identities and how the narratives will progress.

One aspect in video games that is becoming more salient is the use of moral and immoral choices during gameplay. The question posed in this study is whether making moral or immoral choices in role-playing video games is related to the foundations of a player's own moral identity. For the purposes of this study, I will define morality as *a system of beliefs and principles of conduct held by an individual to guide them through decisions individually, culturally, or socially perceived as inherently good or bad* (Gert, 2012).

In this literature review, articles about the ways actions and psychology in video games mirror real-world counterparts will be examined. Articles in which moral play in video games has already been studied will also be examined and critiqued. Additionally, self-perception theory, moral identity theory, and moral foundations theory will be outlined in their relation to video game play. Self-perception theory, moral identity theory, and moral foundations theory can be used to assess the relationship between internalized morality and moral actions in the physical and virtual world.

Real and Virtual Worlds

Comparing real and virtual interactions. One of the fundamental aspects of this study is the assumption that traits and actions performed in video games are in some way translatable to real life. Kozlov and Johansen (2010) wondered how “real” a virtual environment was. They wanted to see whether a study known as the Good Samaritan experiment could be recreated in a virtual environment. Darley and Batson (1973) originally used the Good Samaritan experiment to test whether people would help individuals in need when they themselves were in a hurry to get somewhere. Kozlov and Johansen also added a facet of another study that showed people became less likely to exhibit helping behavior as the number of bystanders observing them increased (Latane & Rodin, 1969).

Kozlov and Johansen recreated the Good Samaritan experiment in a virtual reality environment, where they had 40 participants travel through a computer-generated maze with either a time limit or no time limit, and with few non-playable computer-controlled bystanders or many bystanders. They found that even in a virtual environment, participants were significantly more reticent about helping other characters if more bystanders were present and if participants were under time constraints, just as in the original Good Samaritan study. Kozlov and Johansen’s study signified that psychological processes make players view the virtual landscape in terms similar to the real world. This understanding indicates that players become invested in their immersive virtual roles, which may influence their play choices.

Kozlov and Johansen’s (2010) experiment presented some limitations. The experiment was composed of a simple task and limited gameplay functionality, so these results may not be generalized to role-playing video games where more focus is on narrative along with task completion. Yet the possibility exists that the inclusion of narrative and character building would

increase the effect observed by Kozlov and Johansen. Another potential issue is that the bystander effect of the Good Samaritan study in the virtual environment was only observed if individuals thought real people controlled the virtual bystanders. Under what circumstances would the bystander effect occur if the bystanders were known to be completely computer-controlled characters? Would the bystander effect occur with computer-controlled characters within the narrative structure of an RPG? Though the full results of the bystander effect are somewhat inconclusive, Kozlov and Johansen's experiment still showed that in some ways players see the real world and virtual worlds in similar dimensions.

Greitemeyer and Osswald (2010) studied whether completing pro-social tasks in video games influenced real life pro-social behaviors in participants. The researchers ran three experiments where they had participants play either a pro-social, anti-social, or neutral game, and then they staged a "spontaneous" real world incident to measure participants' levels of helping behaviors. These staged mishaps included knocking over a case of pencils to see if participants would help the researcher pick them up; seeing whether participants would agree to participate in future studies; and seeing if participants would help a researcher being harassed by another researcher. Some limits to the study include a restricted sample size of between 40 and 60 participants and a lack of information on long-term effects. Yet the authors concluded that participants who played pro-social games showed significantly higher instances of real world helping behaviors than those that played neutral or anti-social games. Those who played pro-social games were significantly more likely to help researchers pick up pencils, assist in further studies, and intervene when a researcher was being harassed, than participants who played neutral or anti-social games. Though further studies with greater validity of the instruments used would need to be completed, Greitemeyer and Osswald's study did show initial indications that

pro-social virtual behaviors can influence real world choices. This correspondence between real world and virtual world choices and behaviors is possible through the psychological melding of the player and the player's avatar.

The concept of *character attachment* refers to a process players experience that facilitates players' immersion into RPG worlds (Bowman, Schultheiss, & Schumann, 2012). Character attachment is the process of "internalization and psychological merging of a player's and a character's mind" (p. 169). This definition for character attachment indicates that when players take on the role of characters in a video game setting, most often within RPGs, their psychological and emotional processing becomes linked with that of the virtual characters they are playing as. Bowman et al. proposed that players who were more connected through character attachment to their video game avatars were more likely to have pro-social motivations in their gaming, while those who were less attached to their characters would display more anti-social motivations. They found that players who spent more time playing their favorite games, and felt more attuned to their in-game personas, expressed greater statistically significant pro-social ideals. Anti-socially motivated players expressed a lower sense of responsibility to their avatars' wellbeing. The findings of this study potentially suggest that moral choices within video games are linked to the level of attachment players have to their avatars. If players can form real connections with their in-game personas to the point of influencing their play, can players also feel connected to non-playable game characters that populate virtual worlds and whose actions and personas are controlled by gaming software?

Coulson, Barnett, Ferguson, and Gould (2012) attempted to learn about players' perceptions of non-playable allies in immersive role-playing games. They had participants play through a story with 10 humanlike non-playable characters (NPC). These NPCs displayed

emotions and were given detailed backgrounds and scripted interactions and personalities. After playing, participants were asked to rate their virtual companions on a variety of scales, which were used to judge players' connections to these characters. Coulson et al. found that not only did players form emotional connections to their non-human allies, but players consistently rated particular characters with the highest scores of *love* and *adore* on the Measure of Interpersonal Attraction. Another statistically significant factor they uncovered was that caring about a character was completely independent of that ally's usefulness in game. They found players cared more about the constructed personality of each NPC than how they performed during gameplay. These results indicate that more was going on psychologically and emotionally during video game play than just the scope of the gameplay. These findings are important because they not only indicate the emotional, immersive connection players experience within role-playing games, but the extraordinary level of relational investment with virtual personalities provides a potential reason why players' real identities might influence or be influenced by video game experiences.

Morality in Video Games. The focus of the previous section was on research that examined in what ways the virtual worlds of video games relate to and intersects with the physical world, and now the focus will turn to how real-world morality intersects with video game morality. Hartmann and Vorderer (2010) wondered if social cues excusing violence within gameplay facilitated moral disengagement in the player. They also wanted to know if players experienced more guilt if attention was called to the immorality of players' action within the video game. Hartmann and Vorderer wrote that players who tell themselves that the game is not real still have difficulty morally disengaging because a person's natural instinct is to make objects more human (anthropomorphism), and game designers use anthropomorphism to further

create believable characters. The authors also indicated that players who were self-professed lovers of game violence told them of situations in which they would be unwilling to participate in the gameplay, such as killing children or torturing innocents. Their results showed that when actions in games were framed within the game as more justified (such as killing murderous terrorists), players felt significantly less guilty. This study seems to suggest that story and background within the game setting can influence a player's emotional reaction towards her or his own actions, potentially demonstrating the interaction between players' immoral virtual behaviors and players' moral identities.

Weaver and Lewis (2012) conducted a study to directly assess how making specific moral or immoral choices within a video game would influence a player's guilt and enjoyment of that game, and whether a player's internal morality influenced her or his decisions during gameplay. They had players fill out the Moral Foundations Questionnaire prior to participation, and then they had the participants play the short introduction to an RPG that had 17 choice points where players could be helpful or harmful to an NPC. They found that players' inherent morality did affect their choices in the game, and that a majority of participants (61.3%) made no antisocial choices while only a small number of players (13.3%) made a majority of antisocial choices (p. 612). While Weaver and Lewis determined that moral identity influenced play choices, they did not examine the process behind moral decision-making. Their study was also noteworthy in that while enjoyment of the game was not significantly different statistically across moral play choices, guilt, as measured using the guilt assessment scale of Kugler and Jones (1992), was significantly greater in players who chose immoral actions. Finding that players making immoral choices feel more guilt is interesting because it supports the theory that moral and immoral actions in videogames affect players' self-perceptions and mental wellbeing.

It also indicates that players will find enjoyment playing a video game regardless of how much guilt is produced, and thus continue playing games that give them negative self-images. One issue with the results of this study is that of the participants, only 68% reported playing video games at least 2 hours a week (p. 611), meaning a majority of participants were not regular gamers. Weaver and Lewis did not measure for any differences between veteran gamers' and non-players' choices or responses, even though participants' familiarity with gaming could potentially influence their play choices and/or subsequent feelings. They also only observed the introductory chapter of a game. How might their results differ if they viewed the ending interactions in the game, after players were able to truly immerse themselves in their virtual personas?

Hartmann, Tox, and Brandon (2010) defined guilt as “the dysphoric feeling associated with the recognition that one has violated a personally relevant moral or social standard” (p. 341). In other words, guilt arises out of a lack of moral self-consistency or moral responsibility, concepts relevant to moral identity theory. They defined virtual violence as “any behavior intended to do harm to another video game character, who is motivated to avoid the harm-doing” (p. 339). They said that guilt is an automatic feeling devoid of rational thinking, so players who try to rationalize video game play as “just a game” are struggling against the ingrained attributes of morality and guilt. The authors tested whether inherent empathy affected guilty feelings, as well as justifiable actions. They had participants play a game in one of two ways: either as soldiers attacking a civilian torture camp, or as soldiers protecting the torture camp. In another section they had players assigned to an assassination mission, and in some cases gave them no background of the person to be killed, and in others an extensive biography. They found that the players protecting the torturers and the players assassinating someone with a detailed background

felt guiltier than their counterparts, and the more inherent empathy players had, the guiltier they felt. This is another study that indicated that players being forced to play against their own moral identities experienced negative associations to their gameplay experiences. Is this association also linked to alterations in participants' beliefs about their individual morality and real world identities?

Moral choices in video games can influence players' feelings, causing negative feelings if players make choices antithetical to their moral identities, but do in-game moral choices affect how players perceive their own self-identities? Greitemeyer (2013) studied the effects playing a video game had on participants' senses of their own humanity. He randomly split 60 participants, all personally invited to participate by Greitemeyer, into three groups and had them either play a violent game, a pro-social game, or a neutral game. Neutral games had no inherent moral system, pro-social games had players helping other characters, and violent games had players killing characters. Players then filled out a questionnaire selecting positive and negative human traits that they felt about themselves when they completed playing, which the researchers formed into an overall humanity score. Participants who played the pro-social game reported more positive human traits, while the violent game players reported more negative human traits. This study indicated that video game players' identities as human, and perhaps as moral beings, can be affected by the nature of the choices allowed in gameplay. A potential limitation to this study is that the specific games used in this study may have influenced the results as opposed to the game categories of pro-social, neutral, and violent. This study should be replicated using a variety of games to test for the validity of Greitemeyer's results.

Theories of Identity and Morality

Self-perception Theory. Self-perception theory is the theory that one's behaviors are influenced by one's beliefs about oneself, and in turn one's beliefs about oneself change in accordance with one's behaviors. Robak (2001) stated that through self-perception theory we define our perceived selves based on our actions and behaviors. For example, an individual who views herself as an upstanding citizen might not shoplift, as this behavior is incongruent with her perceived self. If for some reason this person did shoplift, her perception of herself as an upstanding citizen might change. Robak reported that the process for altering one's behaviors through self-perception theory involves performing a particular behavior, and then getting feedback from oneself and others about this action. This feedback leads to a new self-perception of one's ability to act, and this change in perception leads to changes in behaviors. Using the example above, a friend might catch the person who shoplifted, and this friend's feedback, whether angry that she shoplifted or impressed that she got away with it, would change how the person understood her own identity. Robak's explanation of self-perception theory might translate to video games, with in-game behaviors connecting to real world self-perceptions. With this theory one could also assume that the self-perception of one's moral identity could change and be changed by one's moral or immoral behaviors.

Bem (1967) was the founder of self-perception theory, and he determined that our views about our emotions and ourselves could be influenced by our behaviors. He wrote that there are two ways in which our behaviors modify our perceptions of ourselves: First, we come to know ourselves through our behaviors, altering our self-perceptions based on our own views of our actions. Second, relying solely on our own views of our behaviors is difficult, so we must rely on external cues and interpersonal reactions to evaluate and alter our own self-perceptions. The idea

that feedback from oneself and others influences one's behaviors may be transferable to video games. Players may potentially change their self-perceptions through the actions of their avatars, and the feedback they get from the game and game characters caused by their behaviors.

Yee and Bailenson (2009) added onto self-perception theory by indicating that perceptions about one's mood, wants, and behaviors can be influenced by physical alterations of the self. They cited a study in which participants asked to wear black clothing chose more aggressive games to play than participants asked to wear white clothing, insinuating self-perceptions were emotionally tied with the prescribed shirt color. Yee and Bailenson related this position to virtual selves by saying that players will alter their behaviors based on the attractiveness of their online avatars. While Yee and Bailenson focused on how an individual's appearance changes self-perceptions, presumably individuals' actions and choices will have similar effects, as discussed by Robak (2001) and Bem (1972).

What questions come up when relating self-perception theory to gamers' experiences playing role-playing video games? One question is whether behaviors in the virtual environment of the video game can serve in the same way as actions in the physical world. Yee and Bailenson (2009) indicated that virtual attractiveness could influence self-perceptions similar to real world attractiveness, providing the probability that virtual behaviors, like real behaviors, could relate to self-perception. Additionally, can Robak's (2001) theoretical process of changing behaviors through perceptions of one's behaviors be interpreted in video game play? Also, can self-perception theory then be used in video games to explain experiences fostering both positive and negative behaviors and views of self?

Moral Identity Theory. The self-model theory of moral identity is an offshoot of identity theory in which one's actions are influenced by one's unconscious moral identity. Blasi

was an innovator of moral identity research that has spanned decades (Walker, 2004). Blasi (2004) posited that moral and immoral actions are the result of unconscious processes filtered through one's core beliefs about one's core personal identity. With this understanding, morality and personality are inextricably linked, with morality not existing as a human process distinct from personality, but as, "... a specific mode of functioning of each person as a whole" (p. 336). To Blasi, one makes a moral judgment in two phases. The first phase is a mostly unconscious decision about whether or not the proposed action is congruent with an individual's personal identity (self-consistency), and the second phase is processing to what degree the person making the action has social responsibility for said action (responsibility) (Narvaez & Lapsley, 2009). In other words, moral decision-making depends on one's personal identity as well as one's identity within a society or culture. How do the concepts of personal identity and responsibility apply to video game play? Does personal identity translate between individuals and their video game avatars, and how does responsibility function in a virtual environment as opposed to the physical world?

Stets and Carter (2011) determined that there may be instances where Blasi's (2004) two phases of moral identity might be disregarded when engaging in behaviors. They approved of Blasi's concepts of needing to experience moral self-consistency and responsibility to engage in moral actions, but they also posited that specific situational factors might interfere with this pattern. Though many researchers have explained why video games can parallel experiences from the physical world (Epley, Waytz, & Cacioppo, 2007; Kozlov & Johansen, 2010), I wonder whether the video game environment might in some instances act as such a situational factor that interrupts the process of self-consistency and responsibility. Stets and Carter's own analysis of moral identity theory makes it sound similar to self-perception theory. They articulated that

individuals have internal moral identity standards, and individuals' perceptions of their actions must align with this internal standard or the individuals may experience negative emotions.

Reynolds and Ceranic (2007) modified the concepts of moral self-consistency and responsibility into the terms *moral identity* and *moral judgment* respectively, and included a new concept, social consensus, that influences one's use of one's moral identity and moral judgment. As with self-consistency, the term *moral identity* suggests that all individuals have an unconscious moral self with which all moral actions are judged. Individuals unconsciously strive to make moral actions consistent with the ideals of their moral identity. *Moral judgment*, the capacity to distinguish right from wrong and good from evil, influences behaviors. Reynolds and Ceranic indicated that when engaging in a behavior that has a moral element, both moral identity and moral judgment influence what behavior one does and how one feels about it. They also included a third category, social consensus. *Social consensus* is composed of laws and rules that have been deemed by society to be moral or immoral. They indicated that when social consensus is clear and concrete, moral judgment and moral identity are not as necessary to make moral decisions. When social consensus is vague or unknown, individuals rely on their moral judgment and moral identity to make decisions. With single-player video games, social consensus would be the laws and rules of each virtual world, however because of the lack of real social consequences, the possibility exists that social consensus will not have as much of an impact on players' moral decision-making.

Another measurement of morality comes in the form of one's moral foundations, as proposed by Graham, Haidt, and Nosek (2009). Moral foundations theory takes moral identity theory a step further by posing that one's moral identity is composed of five distinct moral foundations. These foundations are Harm/Care, Fairness/Reciprocity, In-Group/Loyalty,

Authority/Respect, and Purity/Sanctity (Graham et al., 2009). Individuals' moral identities are composed of different levels within these five categories. Some individuals' morals may be more focused on harm and care, while other individuals' moral identities may connect more with authority and respect. Graham et al. found specifically that more politically liberal-minded individuals scored slightly higher in Harm/Care and Fairness/Reciprocity than politically conservative participants, but politically conservative participants scored much higher in In-Group/Loyalty, Authority/Respect, and Purity/Sanctity.

Moral foundations theory differs slightly from moral identity theory by categorizing morality. Moral identity theory poses that one's moral self influences and is influenced by one's decisions, and moral foundations theory indicates specifically how one's moral self is composed. A noteworthy point from Weaver and Lewis' (2012) study is that Harm/Care and Fairness/Reciprocity were distinctly used to gauge participants' morality. Since Graham et al. (2009) found that Harm/Care and Fairness/Reciprocity scores were fairly consistent across political ideologies, when comparing individuals the levels of Harm/Care and Fairness/Reciprocity scores in particular could more accurately assess overall morality than In-Group/Loyalty, Authority/Respect, or Purity/Sanctity, which were more heavily favored by conservative participants.

Summary

In these studies a variety of important factors related to players' perceived morality while engaging in video game play were presented. They showed some of the ways players engaged with virtual characters and environments, and how these experiences related to those of the physical world (Bowman et al., 2011; Coulson et al., 2012; Greitemeyer & Osswald, 2010; Kozlov & Johansen, 2010). They also showed that negative feelings were fostered out of playing

games against one's internal moral code, and positive self-perceptions occurred when playing congruently to one's moral identity (Greitemeyer, 2013; Hartmann, et al., 2010; Hartmann & Vorderer, 2010; Weaver & Lewis, 2012). One thing these studies did not include was first-hand accounts of players' experiences and perceptions of their own moral play in video games. My study will add to the literature on this subject by analyzing players' narratives of their play experiences, and observing any link between players' stories and players' own internal moral foundations. In this study I will focus on players' own accounts of moral choices in RPGs, providing a new perspective and understanding of the relationship between individuals' morality and their moral choices in video games.

CHAPTER III

Methodology

Through this study, I explored how making moral choices in role-playing video games related to players' real world morality. Using a variety of survey questions collecting role-playing game (RPG) players' perspectives on their video game play choices, I examined the intersection between individuals' moral foundations and their moral choices in virtual environments. Detailed in this section is the design of this study, participation criteria, how data were collected and analyzed, and ethical issues with this project.

Study Design

This exploratory study involved a mixed-methods procedure to acquire measurable quantitative data alongside descriptive qualitative data. Quantitative data provided information regarding participants' play styles and perceived moral identities, while qualitative accounts provided narratives of personal experiences that could be compared with quantitative answers. The quantitative component of this study consisted of closed-ended questions, utilizing likert scales to determine participants' locations along spectrums of morality and moral play styles. Qualitative questions were open-ended and asked for detailed accounts of participants' experiences.

In addition to the mixed-methods questions investigated in this survey, a morality measurement tool was used to determine participants' internalized moral foundations. The scores obtained through this tool could be compared with participants' qualitative and quantitative

answers. The Moral Foundations Questionnaire (MFQ) (Graham, Haidt, & Nosek, 2008; see Appendix A) was the measurement tool used for determining participants' morality. The MFQ is a 30-question survey assessing participants' moral foundations in five categories. The categories are Harm/Care, Fairness/Reciprocity, In-Group/Loyalty, Authority/Respect, and Purity/Sanctity. The MFQ consisted of 15 questions about how relevant particular moral statements were to participants when making decisions, and 15 questions asking whether participants agreed or disagreed with morally subjective statements. Five scores were calculated, one for each category, indicating participants' levels of morality related to each foundation.

Though qualitative accounts were fundamental to this data collection process, a mixed-methods format seemed more appropriate than entirely qualitative interviewing. Quantitative comparisons helped anchor the descriptive aspect of this study, providing objective hard data to validate the results. Utilizing a survey is less labor intensive than the in-person interviewing process, and thus allowed for the participation of more individuals than would be feasible using the interviewing method. A potential weakness, however, of not engaging in individual qualitative interviews was that the survey questions were the only contact between participants and researcher. Answers that only provided a small peek into the world of a gamer could not be followed up with more questions. Additionally, the option to skip portions of the survey may have impacted the reliability of the resulting information. Of the 143 individuals who were eligible to complete the survey, 51 individuals completed every required survey questions and were included in this study, six skipped every question following their agreement to the informed consent, 14 participants stopped providing data after the first questions, and the largest loss of participation occurred at the first qualitative question with 43 people skipping to the end of the survey.

Sample

The population observed in this study was individuals who have played single-player role-playing video games where making branching moral choices was a fundamental game mechanic. Participants were screened for age, needing to be 18-years-old or older to participate. Participants were also screened for country of origin, allowing for only United States citizens to take the survey. This screening page appeared before the informed consent (see Appendix B) on the online survey (see Appendix C). Only United States citizens were assessed in this study in order to minimize cultural discrepancies between moral understandings. The survey itself was also only in English, so limiting the participant pool to United States citizens hopefully diminished the participation of non-English speakers who may not accurately comprehend the questions. Screening questions about age and country of origin were included at the beginning of the survey to disqualify potential participants who did not fulfill the necessary criteria for participation. Participants who did not meet the criteria to participate in the study were sent to a page thanking them for participating, without giving them access to any of the survey questions. The online flyer (see Appendix D) used to recruit participants also listed the necessary characteristics for participation. Demographic characteristics of gender and ethnicity were asked for at the end of the survey, but were not used for screening purposes.

Recruitment

The participants for this study were from a nonprobability convenience sample acquired through online gaming communities. The goal was to get between 50 and 100 online participants. A convenience sample of this population responded to an online request forum created through the video game sub-forums on the website Reddit, as well as through posts on Facebook. The Reddit sub-forums that were targeted were specifically oriented towards video

games and role-playing video games, such as /r/gaming and /r/rpg_gamers. The online flyer specified the types of games that were significant to this study, as well as provided a list of some relevant and well-known games and franchises.

Since this was a convenience sample found within a specific online community, only gamers of particular economic situations and personal dispositions were able to access the survey. Gamers who do not or could not access the Internet to engage in game-related discussions were not being represented. Also those who chose to participate may have had specific reasons for their investment in this study, and these agendas might be reflected in the data. Demographic variables such as gender and race were not actively sought out, as the participants were made up of a convenience sample of individuals who chose to participate. Therefore the populations participating in this study could be diverse or homogenous, depending on who accesses online video game resources, and who chose to participate in this survey.

Ethics and Safeguards

Informed consent was acquired from participants for this study at the beginning of the survey. Before participants were allowed to complete any survey questions, they were required to read the informed consent and electronically consent to participate in the study by selecting the “I Agree” check box following the informed consent document. This method of gaining consent was used to insure informed consent while maintaining anonymity. If participants chose the “I Disagree” check box following the informed consent document, they were transferred to a page thanking them for their time, and they were not allowed to participate in the survey. Once participants electronically agreed to the informed consent, they were admitted to the first section of the online survey.

Participants who completed the survey took it anonymously online through the website surveymonkey.com. No defining signifiers or characteristics of participants were recorded, thus insuring participants' complete anonymity. All research materials will be stored in a secure location for three years according to federal regulations. In the event that materials are needed beyond this period, they will be kept secured until no longer needed, and then destroyed. All electronically stored data will be password protected during the storage period. Participants will remain anonymous, and participants' data will be kept protected.

The survey used in this study was authorized by the Human Subjects Review (HSR) committee of Smith College prior to being accessible online (see Appendix E). An application was submitted to the HSR committee describing the method detailed under the methods section of this thesis. The HSR application included information pertaining to the study design, participants and recruitment procedure, what is included in the survey, and potential benefits and concerns of this study.

This method and study has a few potential ethical concerns. One possible concern might be that it could be harmful for individuals to be faced with their own moral identification. Releasing generalized information obtained through the survey as opposed to individual participant scores will help mitigate this concern. Participants could also access supportive resources if needed following the survey by contacting resources listed on the informed consent. Another potential concern is that the results of this study could feasibly contribute to altered understandings of one's own play experiences, and lessen enjoyment from this hobby. Questions were constructed to encourage positive reminiscences about playing games, but participants could access online support resources supplied in the informed consent if they experienced negative reactions associated with the survey questions.

Participants for the mixed-methods survey were sought out through websites associated with gaming, so the mixture of participants were individuals who have access to these resources and were willing to take the time to complete the survey. Though resources were provided for participants who experienced negative reactions to this survey, the risks involved seemed relatively low compared to the benefits. Potential direct benefits for participants were having an opportunity to explore experiences that have brought enjoyment to participants, gaining some insight into individuals' experiences of making choices in role-playing games, and contributing to the greater knowledge of research into video game play and identity. Finally, this author's own bias as a video game player might have informed the formation of the survey and the analysis of the results, and this author and author's editors have checked for this perspective in the survey, findings, and discussion.

Data Collection

Participants were asked to complete an online survey consisting of two main sections. The first section consisted of qualitative and quantitative questions pertaining to participants' game choices and play styles. This section took around 10 minutes to complete. The second section was the Moral Foundations Questionnaire (MFQ), containing 30 questions about participants' moral foundations in five categories. This section took about 10 minutes to complete. The survey also included short demographic and informational questions. In total, the survey took about 20 minutes to complete.

The informational questions began at the start of the survey with a screening page making sure participants were 18 or older as well as United States citizens. This page was followed by the informed consent, which participants must have agreed to in order to continue with the

survey. Following the informed consent were questions about participants' gaming habits. The survey ended with demographic questions asking about participants' ages, races, and genders.

The first main section of the survey consisted of questions formulated by this author about players' gaming experiences. Quantitative questions were used to gain numerical indicators through likert scales of players' perceptions of their personal traits and gaming styles, and qualitative questions focused on specific experiences players have had in role-playing video games. A quantitative question used in this study was, "When you play an RPG in which you can choose to play as "good" (light-side, paragon, etc) or "evil" (dark-side, renegade, etc.), which do you prefer to play as?" The terms used in parenthesis are expressions from particular video games denoting *good* or *evil* choices and actions. A 5-point scale with 1 being "I always play as good" and 5 being "I always play as evil" followed this question. At the end of the survey the final question before asking for questions and comments from participants was, "How moral or immoral do you consider yourself?" using a 5-point likert scale assessing participants' self-perceptions of their own morality, with 1 being "very moral" and 5 being "very immoral". This question pertaining to participants' perceptions of their morality was at the end of the survey as it could influence participants' answers to other questions, and of all the questions asked it is the most sensitive inquiry.

Qualitative questions focused on participants' experiences within games and making moral choices in these games. Two questions illustrating this point were, "Write about a time in an RPG where you were asked to make a choice, and you chose to do something mean or self-serving," and in turn "Write about a time in an RPG where you were asked to make a choice, and you chose to do something kind or helpful." These questions each had two follow up questions, "How did you feel after making that choice?" and "Is there anything else you would like to

add?” Another question focused on being forced to make a particular choice, “Describe a time in an RPG where the game forced you to make a decision you did not want to do.” These questions were constructed so that participants’ answers would provide descriptive insight into players’ approaches to moral choices in video games. These questions were tested for comprehension and validity prior to the survey phase of this study by pretesting them with friends.

The Moral Foundations Questionnaire followed the qualitative and quantitative questions. The first half of the MFQ asks how relevant 15 considerations are to participants when making decisions. Examples of these considerations are “whether or not someone suffered emotionally” and “whether or not someone violated standards of purity and decency”. The second half of the MFQ asks participants whether they agree or disagree with 15 statements. Examples of the statements are “compassion for those who are suffering is the most crucial virtue” and “justice is the most important requirement for a society”. When participants filled out all 30 answers, the answers were scored in the five categories of moral foundations.

Data Analysis

I analyzed the collected data by comparing the qualitative answers with the five moral foundations scores from the Moral Foundations Questionnaire, and exploring themes present within participants’ narratives. The qualitative selections were coded for a variety of themes about in-game morality and decision-making. The codes obtained from participants’ narrative answers were compared to participants’ answers to quantitatively scored questions. I explored what themes players addressed in their answers, and how these themes related to participants’ perceived play styles and morality. I also explored these themes in relation to participant’s MFQ scores.

The data gathered from the MFQ was scored using the MFQ scoring sheet where each question in the MFQ applied to a different moral foundations category. These answers were added up to come up with the five moral foundations scores for each participant. The coded data from the qualitative section, as well as participants' quantitative answers, were compared to participants' MFQ scores. I anticipate players' morality scores will in some way correspond to their scores from the survey's qualitative and quantitative questions.

CHAPTER IV

Findings

The results of this study determined that a link exists between role-playing video game players' assessed morality and their chosen moral styles of play in single-player role-playing video games in which narrative decision making is a key feature. One major finding of this study is that a correlation exists between participants' Harm/Care and Fairness/Reciprocity morality scores as determined by the Moral Foundations Questionnaire (MFQ) and players' preferred moral play styles in RPG video games as determined by a likert scale in the survey. The second major finding determined prevalent themes from players' narratives, including Care/Harm, Fairness/Unfairness, Loyalty/Betrayal, self-consistency, "It's a game," and resetting. The third major finding is that the narratives provided by the players with the highest scores in Harm/Care and Fairness/Reciprocity differed in thematic material from those of the players with the lowest Harm/Care and Fairness/Reciprocity morality scores.

The first section of this chapter presents general data collected for this study from the survey and the MFQ. In the second section we will observe the correlations that exist between players' assessed morality scores determined by the MFQ and players' perceived morality and preferred moral play styles in single-player RPGs as determined by likert scales within the survey. In the third section I assess participants' narrative answers to the qualitative survey questions by coding these accounts for similar themes and their relations to the MFQ. In the final section I compare individuals' coded narratives with their MFQ scores.

General Data

From a convenience sample of participants found through the websites Reddit and Facebook, 51 participants fulfilled the necessary criteria to fill out the survey, as well as completed enough of the survey questions to be eligible to be included in this study. The age range of the participants in this study was from 19 years old to 42 years old (mean=27.5, median=27, mode=27). Of the 51 participants, 82% (n=42) identified as male, 12% (n=6) identified as female, 2% (n=1) identified as transgender, and 4% (n=2) identified as “other.” Those who selected the “other” category for gender reported they identified as gender fluid and a-gendered. In terms of race, of the 51 participants, 78% (n=40) identified as white, 9% (n=4) identified as Hispanic or Latino, 9% (n=4) identified as Asian or Pacific Islander, and 2% (n=1) identified as African-American. Additionally, 4% (n=2) preferred not to answer and 6% (n=3) selected the other category. Three participants identified with 2 racial categories, with two identifying as white and Hispanic/Latino, and one identifying as white and other (Jewish).

From the survey I determined how many hours participants spend playing video games in general and how many hours they spend playing specifically RPGs. The greatest percent of participants (25%, n=13) reported that they played video games for 7-10 hours a week (24% [n=12] played 11-15 hours a week, 20% [n=10] played 16-20 hours, 16% [n=8] played 21 or more hours, 10% [n=5] played 3-6 hours, and 6% [n=3] played 0-2 hours a week). Of those players, 33% (n=17) reported playing RPGs at least 3-7 hours a week (24% [n=12] played RPGs 11-15 hours a week, 20% [n=10] played 7-10 hours, 14% [n=7] played 0-2 hours, 9% [n=4] played 16-20 hours, and 2% [n=1] played 21 or more hours). Examples of single-player RPG video games that participants commonly reported playing were the Mass Effect series, the Elder

Scrolls series, Fable, Fallout, the Witcher, Knights of the Old Republic, and the Dragon Age series.

When asked what their preferred moral play styles were in RPG video games, a majority of participants (51%, n=26) reported that they usually play RPGs as “good.” Twenty-two percent (n=11) reported they play as good and evil equally, 18% (n=9) reported they always play as a good, 6% (n=3) reported they usually play as evil, and 4% (n=2) reported they always play as evil. Players were also asked using a likert scale how moral they believed they were. Forty-seven percent (n=24) believed they were “somewhat moral,” 24% (n=12) reported they were “very moral,” 22% (n=11) reported they were “neutral,” 6% (n=3) reported being “somewhat immoral,” and 0% reported being “very immoral.”

Participants completed the Moral Foundations Questionnaire, which I scored using the MFQ’s measurement tool to find five scores measuring participants’ moral foundations. The five assessed moral foundations were Harm/Care, Fairness/Reciprocity, In-Group/Loyalty, Authority/Respect, and Purity/Sanctity. Scores for these categories could range from 0 to 30, with 0 meaning the moral foundation had no relevance to that person’s internalized moral system, and 30 meaning that moral foundation was extremely relevant to that person’s internalized moral system. The average person’s scores in these five categories as stated in the MFQ (Graham, Haidt, & Nosek, 2008) are Harm/Care=20.2, Fairness/Reciprocity=20.5, In-Group/Loyalty=16.0, Authority/Respect=16.5, and Purity/Sanctity=12.6. In this study, 50 of the participants adequately completed the questions to arrive at a Harm/Care score (range=7-30, mean=21, median=21.5, mode=17). Forty-eight participants answered enough questions to arrive at a Fairness/Reciprocity score (range=11-29, mean=21.9 median=22, mode=18). Fifty participants completed enough answers to arrive at an In-Group/Loyalty score (range=4-22,

mean=12.8, median=13, mode=9). All 51 participants completed enough answers to arrive at an Authority/Respect score (range=1-23, mean=9.9, median=9, mode=8) and a Purity/Sanctity score (range=0-25, mean=6.9, median=6, mode=4).

Data Correlations

Three primary correlations were examined in this study. First, players' in-game moral play styles along a 5-point likert scale with 1 being "I always play as good" to 5 being "I always play as evil" were compared to players' perceived real world morality determined from a 5-point likert scale with 1 being "very moral" to 5 being "very immoral". Using Spearman's rho, a weak yet significant positive correlation was found between in-game moral play style and perceived real world morality ($\rho=.293$, $p=.037$, two-tailed). This indicates that players who perceive their identity as more moral tend to make more moral decisions in RPGs, or vice-versa.

The second correlation compared players' perceived morality to their 5 moral foundations scores attained through the MFQ (Table 1; See Appendix F). No correlation was found between perceived morality and players' scores for the foundations of Harm/Care, Fairness/Reciprocity, or In-Group/Loyalty. A weak but significant correlation was found between perceived morality and Authority/Respect scores ($\rho=-.287$, $p=.041$, two-tailed), meaning players with higher scores for the Authority/Respect category reported higher perceived moral identities. The data also showed a moderate but significant correlation between perceived morality and players' Purity/Sanctity scores ($\rho=-.416$, $p=.002$, two-tailed), meaning players with higher Purity/Sanctity scores reported higher perceived morality.

The third correlations compared players' in-game moral play styles to their 5 moral foundation scores attained through the MFQ (Table 2; See Appendix F). No correlation was found between moral play style and the foundations of In-Group/Loyalty, Authority/Respect, and

Purity/Sanctity. A weak but significant correlation was found between moral play style and players' Harm/Care scores ($\rho = -.286$, $p = .044$, two-tailed), meaning players with higher Harm/Care scores reported playing more moralistically. A weak but significant correlation was also found between moral play style and players' Fairness/Reciprocity scores ($\rho = -.288$, $p = .047$, two-tailed), meaning players with higher Fairness/Reciprocity scores reported playing more moralistically as well.

Player Narratives

Participants provided narrative accounts of particular moral decisions they made within RPGs' virtual environments. These descriptions were in response to a variety of survey questions prompting gameplay reminiscences. Gamers responded to questions about helpful or kind decisions made within video games, harmful or cruel choices they made, and times they were forced to make a choice they did not agree with. I coded these narratives for common themes and understandings about the decision-making experiences.

Moral Foundations within Narratives. The first themes identified were related to categories of the MFQ. Players detailed instances of either upholding a moral foundation in gameplay or denying the moral foundation. These coded categories are Care/Harm, Fairness/Unfairness, Loyalty/Betrayal, Authority/Subversion, and Purity/Degradation. A majority of players (80%, $n = 41$) discussed making choices that either resulted in caring for or helping in-game non-playable characters (NPCs) or harming NPCs (Care/Harm). Examples of accounts indicating Caring are "In Vampire the Masquerade: Bloodlines I decided to play a character who never sucked human blood" and "Early on in Fallout you can report a guy or let him blow up the town. I immediately reported him." Examples of Harming are "I was playing Arcanum, and I decided to gain information in the main quest by killing someone, reviving them,

and torturing their soul” and “I entered a house with a stranger who said he wanted to investigate some evil presence there. It turned out there was a demon-type entity living there and it forced me to kill who I went into the house with.”

Thirty five percent of participants (n=18) mentioned Fairness or Unfairness in some capacity. Fairness and Unfairness responses are characterized by justice, upholding or violating rights, and altruism. Participants’ examples of Fairness are “I usually kill based on justification based on actions of the enemy. A guard doing their job will evade wrath more than an agent of the main villain” and “In Fallout 2, I repaired the nuclear power plant of an ailing community, despite the wishes of a more powerful yet obviously racist and xenophobic neighbor.” Examples of Unfairness are “If minor characters ask me to return a powerful item, I’ll usually look up the reward to see if it’s better than the item, if not, I’ll keep it” and “...I might solve someone’s problems and then immediately steal their items.”

Thirty nine percent of participants (n=20) included decisions revolving around Loyalty and Betrayal in their accounts. The theme of Loyalty is characterized by self-sacrifice for the group and valuing group ideals and group members in lieu of others, while Betrayal presents situations where the individual sacrifices relationships for personal gain. Examples of Loyalty are “A companion Zaeed has a score to settle, but in the process you must make a choice between saving civilians or helping Zaeed settle the score. I chose Zaeed, which is not a choice I would normally make” and “In Dragon Age Awakening I made the decision to save my companions over the city of Amaranthine during the siege on Vigil Keep.” Accounts of Betrayal include “In Dragon Age... I found decisions with Jowan to be rather difficult, juggling loyalty to a friend with loyalty to the Circle/repudiation of blood magic. In the end I betrayed Jowan, the Circle and my ideals” and “...at the end of Baldur’s Gate 2 when you can choose to sacrifice

your own companions in exchange for more personal strength before you fight it out with Jon Irenicus.”

The themes of Authority/Subversion and Purity/Degradation were less prevalent in the narratives. Sixteen percent (n=8) of participants mentioned a decision involving Authority or Subversion, while 0% (n=0) indicated decisions involving Purity or Degradation. Authority is characterized by players valuing leadership and followership, and having deference to authority and respect for tradition, while Subversion indicates players actively rebelling against such in-game institutions. An example of the theme of Authority or Subversion from a participant account is, “There was an instance where I had to lie to help a friend. [I felt] guilty for lying to an authority figure but relieved I had helped a friend.” Another participant described an experience in which the king kills the player’s friends and another friend captures the king and wants to kill him, but the player gets to make the decision and he wrote, “I choose, without fail, to save [the king].”

Other Prevalent Themes. Another theme that was prevalent throughout the player accounts was of self-consistency. Self-consistency was noted if players applied their play choices to their real world beliefs, wants, feelings, or actions, and was recorded if players reported their play was in line with their real world morals or if players recognized how their choices were not aligned with their true identities. Examples of self-consistency are one player saying he makes good choices because, “I would like to feel that’s how I would respond in real life,” and another player writing after making a mean choice, “I would feel so bad if it was a real person (I’d never do that in real life).” Forty one percent (n=21) of participants made at least one comment that related to self-consistency. One particularly powerful response indicating self-consistency was from a player who helped an NPC conquer addiction, “dealing with addiction personally and in

my family made the decision really a no-brainer for me. But I have seen enough people backslide to know just how difficult those decisions can be...”

The theme of being part of a game, or “It’s a game,” also came up frequently throughout the player accounts. “It’s a game” indicates that players noted that they were playing a game or playing as a character in a game, or called attention to game goals and mechanics outside of the fictional universe. Seventy one percent (n=37) of participants called attention to the fact that they were playing a game in their narratives. Examples of this are, “The ‘character’ I was playing was not good or evil, he was proud, arrogant, and supremely insecure,” and “I offered [Lydia] as a sacrifice in order to complete an achievement,” and “I felt amused, the scripted reactions are always well acted.”

Going side-by-side with the theme of “It’s a game” is the theme of players restarting games and missions, or altering games to get desired results, which will be called “resetting.” Twenty two percent (n=11) of participants mentioned being so distraught by a choice they made that they had to end the playthrough and try again. Examples of this phenomenon are, “I made sure [the scientist] was safe while navigating the sewers, and actually re-loaded an earlier save file when he died to make sure he survived,” and “I was so bothered by it that I downloaded a mod that let me refuse the quest while progressing the story.”

Narrative and Moral Foundations Comparison

Harm/Care and Fairness/Reciprocity MFQ scores correlated with moral play styles, and were used to compare assessed morality to participants’ narratives. Four participants had the highest Harm/Care scores, with scores of 27, 27, 28, and 30. One of these participants did not report overly harmful actions. For the question about describing a mean or self-serving action in a game, the participant presented a slightly selfish action, but one that was not overly harmful or

unfair. This participant also reported feeling guilt over particularly harmful choices. On the other hand, another participant reported that he plays games almost entirely as evil. This participant's narrative describes how much fun he has engaging in activities that harm others. However, this same participant also wrote, "I'm a naturally nice person and I like to role-play as the exact opposite of myself. If I caught someone carrying the real-life equivalent of \$1,000,000 in a role-playing game, I would steal it, whereas in real-life I wouldn't be able to live with myself." A third participant wrote that she always plays as good. She wrote that she once wanted to experience making an evil choice, and it left her "guilty and remorseful". The fourth participant reported always playing as evil. This player noted feeling powerful and empowered when making cruel or controlling choices. However, like the other high-scoring participant that enjoys playing as evil, this participant reported, "I would feel so bad if it was a real person (I'd never do that in real life)."

Four participants had the lowest Harm/Care scores, with scores of 14, 14, 12, and 7. One low-scoring participant reported that feelings have nothing to do with his gaming experience. "I don't really 'feel' when making choices like this in game, I normally pick the option that furthers my RP of my character." Another player had a similar philosophy and wrote, "There is no real emotional link between the choice I'm making and what I would do in a real life situation." This player reported wanting to play through a game as both good and evil, and feels "amused" by the results. The third participant wrote about feeling bad about making cruel choices, but also justified such choices by writing, "Even though they are the wrong choices from a particular perspective, from a different perspective they are actually the right choices." When responding to the question about what kind or helpful choices you have made, this player engaged in a philosophical debate about making such choices in games and the different reward system for

making moral versus immoral choices in games. The final low-scoring participant recounted that making cruel decisions doesn't matter to him. "Blew up megaton. Slaughtered the NPCs in Tenpenny Tower so the ghouls could live there. Sent people to the slavers in Paradise Falls. List goes on. It's a game. Didn't bug me at all." This participant reported for his kind or helpful choice that he let a terrorist leader live, but he then reported that he wished he had killed him instead.

Four participants had the highest Fairness/Reciprocity scores, with scores of 28, 28, 29, and 29. The first high scoring participant wrote that he always plays as good. This player reported making a cruel decision in order to get a powerful item, and the player commented twice that it did not feel good to make that choice. "If there was another option to get that weapon, I would have taken it." The second participant wrote that he usually plays as evil, and that he creates a complete persona for the characters he plays as. "I try to create full personas, characters that are motivated by internal ethics and attempt to remain consistent throughout my gameplay." This participant's answers to a time in an RPG where he made a kind or helpful decision, or a time he made a mean or self-serving choice, were coded with the Fairness/Reciprocity theme. The third participant reported "most of the time" he makes kind or helpful decisions. This player wrote he gets frustrated when games only offer the illusion of choice. The final high-scorer in Fairness/Reciprocity wrote that when she made a cruel decision, "If I did, it was usually by accident." She makes moral choices, "Literally all the time, if I can help it."

Three participants had the lowest Fairness/Reciprocity scores, with scores of 16, 12, and 11. The first participant with the lowest score in Fairness/Reciprocity also had one of the lowest scores for Harm/Care. This participant wrote, "I don't really 'feel' when making choices like this

in game, I normally pick the option that furthers my RP of the character.” The second participant with the lowest score reported usually doing “all the nice things I can.” This participant wrote he made a cruel choice because, “you do what you must to survive,” and then he wrote, “I then embraced evilness for the playthrough.” This participant also wrote that he did not finish his evil playthrough, and switched to playing as a good character. The final lowest scoring participant wrote, “My characters usually lie, cheat, and steal, but almost never murder,” and he wrote, “Usually I think it’s hilarious. Sometimes I feel guilty.”

In summary, the results showed common themes within participants’ narratives, as well as significant, if weak, correlations between some of the data. The results showed that players perceived morality is positively correlated to players’ moral play styles in single-player RPG video games. A significant correlation also exists between players’ moral play styles and their MFQ scores for Harm/Care and Fairness/Reciprocity. However no correlation is present between players’ Harm/Care and Fairness/Reciprocity scores with players’ perceived moral identities. In addition, the theme of Care/Harm was most common throughout players’ narratives, followed closely by the themes of Fairness/Unfairness and Loyalty/Betrayal. The theme of Authority/Subversion was present to a lesser degree, and Purity/Degradation was completely absent. Other common themes were that of self-consistency, “It’s a game,” and resetting. Finally, when comparing the participants with the highest and lowest scores in Harm/Care and Fairness/Reciprocity with their individual narrative responses, one can see overlap between the assessed morality scores and the reported video game experiences.

CHAPTER V

Discussion

The purpose of this study was to determine if and in what ways moral decision-making in single-player role-playing video games was related to players' own internal morality. This study looked at whether gamers had a realistic impression of their own moral identities, and in what ways their moral identities connected to their moral play styles in single-player RPG video games. This study assessed players' internalized moral foundations and compared these assessed morality scores with players' own narratives about their decision-making experiences in RPGs.

The key findings were separated into three parts. The first part was the correlation between participants' assessed moral foundations and their perceived morality and moral play styles. A significant correlation existed between players' perceived morality and their moral play styles. Although no correlation existed between players' Harm/Care or Fairness/Reciprocity scores with their perceived morality, a significant correlation was present between players' Harm/Care scores and Fairness/Reciprocity scores with moral play styles.

The second key finding involved participants' coded narratives. Players overwhelmingly engaged in decision-making around the Care/Harm moral foundation, followed closely by accounts of Fairness/Unfairness and Loyalty/Betrayal. Players wrote least about decisions concerning Authority/Subversion, and not at all about choices related to Purity/Degradation. Other common themes brought up by players in their narratives were self-consistency, referring to real world feelings or actions about virtual choices; "It's a game," referring to the fact that the person was playing a game outside of the fictional experience; and resetting, situations in which

players chose to restart the game or to alter the code of the game to get a desired decision-making result.

The third major finding was determined by analyzing the narratives of participants with the highest and lowest scores in the Harm/Care category and Fairness/Reciprocity category from the MFQ. Players with the highest scores in Harm/Care reported playing as either completely good, to the point of feeling guilty about making cruel decisions, or completely evil, but maintaining that in the real world they are kind people who could never make the mean choices they make in video games in real life. The participants with the highest Fairness/Reciprocity scores generally reported making kind or caring decisions and feeling bad about cruel choices, and one of the high scoring players reported playing as evil, but created a persona to play as separate from his own. The lowest scorers in Harm/Care reported generally having no emotional investment in the game, and referred often to playing a game as opposed to having a genuinely immersive experience. The players with the lowest scores for Fairness/Reciprocity reported making choices that helped the player at the expense of NPCs, while not physically harming the NPCs.

Findings and the Literature

My first finding was that there was a correlation between players' Harm/Care and Fairness/Reciprocity scores with their moral play styles. The previous literature on this subject posed the question of whether a connection exists between one's actions and beliefs in real life and one's actions and decisions within the video game environment (Bowman et al., 2012; Greitemeyer & Osswald, 2010; Kozlov & Johansen, 2010). Finding that in my study Harm/Care and Fairness/Reciprocity scores correlated with moral play styles would seem to indicate that players were choosing to play RPGs making moralized decisions in line with their real world

morality, which would agree with the findings in previous studies. Kozlov and Johansen (2010) found that to some degree players engaged with their game as players would engage in real life, and Greitemeyer and Osswald (2010) found that there was a relationship between players' gameplay and real world behaviors. My third finding, however, did not quite agree with my first finding or that of the previous literature. The narratives of the players with the highest and lowest morality scores did not necessarily play RPGs congruently with their assessed morality. The unbalanced number of players who reported playing games as good may have swayed the data and impacted the correlation. The implications of the third finding will be examined later.

The second finding concerned the prevalence of particular themes within my data. Finding that Harm/Care and Fairness/Reciprocity scores were among the highest reported moral foundations within the narratives was consistent with the findings in the MFQ (Graham et al., 2008) and in Weaver and Lewis's (2012) study. Finding that the In-Group/Loyalty foundation was higher than in the average person was not something that was examined in previous literature. In-Group/Loyalty was mentioned slightly more than Fairness/Reciprocity, with 39% (n=20) of participants mentioning Loyalty/Betrayal versus 35% (n=18) of people mentioning Fairness/Unfairness. In the MFQ the average person's Harm/Care score and Fairness/Reciprocity score was higher than the other three moral foundations, with scores of 20.2 and 20.5 respectively. In the MFQ the average person's In-Group/Loyalty score was only 16. Though experiences of In-Group/Loyalty were addressed frequently in player narratives, the mean In-Group/Loyalty score of my participants was close to average at 12.8. The greater numbers of mentioned In-Group/Loyalty found in my study could be a product of the emphasis on relationships and party members within RPG gaming. Loyalty may also have been more

prevalent in narratives because in RPGs relationships to party members may facilitate more substantial immersion and character attachment for players.

In my study, correlations between moral play style and assessed morality were only correlated for Harm/Care and Fairness/Reciprocity, so when comparing participants' assessed morality to their narratives about in-game decision-making, I opted to only use their Harm/Care and Fairness/Reciprocity scores. According to Weaver and Lewis (2012), Harm/Care scores and Fairness/Reciprocity scores most closely indicate overall morality, as these scores are mostly consistent across political affiliations, unlike the other three foundations. Assuming Weaver and Lewis are correct, I could identify a connection between real world morality and RPG video game decision-making if participants with the highest Harm/Care and Fairness/Reciprocity scores reported moral decision-making. Conversely, participants with the lowest MFQ scores in Harm/Care and Fairness/Reciprocity should have had narratives that highlighted less than moral virtual decisions. Though I did not necessarily find that moral players played morally and immoral players played immorally, I did find noteworthy thematic differences between high-scorers and low-scorers in the MFQ.

For my third finding, comparing my participants' narratives to their morality scores showed an interesting trend not discussed in previous literature. Players with high moral scores in Harm/Care and Fairness/Reciprocity did not always make positive moral decisions in video games; in fact the highest scorers were almost evenly split down the middle of playing games as either completely good or completely evil. Therefore my study indicates that the moral play style within the game itself may not always be related to the player's moral identity, and in fact a different aspect of video game play is related to moral identity. My results differ from Kozlov and Johansen's (2010) experiment, which indicated that, in particular circumstance, video game

players' understanding of the virtual environment could closely resemble their understanding and actions of the real world. Similarly, Greitemeyer and Osswald's (2010) study presented that playing different types of moralized video games could influence one's real world moral actions. My third finding opposes previous literature and my first finding by showing that real world morality does not necessarily translate into predictable moralized gameplay.

Instead of real world morality translating to gameplay decisions in RPGs, my study proposes that real world morality relates to players' immersion in the video game world and their ability to empathically connect with their in-game avatar. Bowman et al.'s (2012) study focused on the concept of *character attachment*, or the psychological merging of the player's consciousness with their video game avatar. They found that players who had high levels of character attachment to their avatar, and who were particularly invested in that particular virtual world, engaged in more positive moral decision-making than players with low character attachment, who made more immoral decisions. In my results, the narratives of the participants with the lowest moral scores in Harm/Care and Fairness/Reciprocity, like Bowman et al.'s participants, displayed what I interpreted as low character attachment and immersion. The low scoring participants' narratives focused on reiterating the fact that they were playing a game, that they did not see a connection between the game and them as a person. The low scoring participants appeared to not be emotionally invested in their character or the virtual world, which upholds part of Bowman et al.'s findings.

Players in my study who scored high on the assessed morality measure did not necessarily always make upstanding moral decisions in game, as reported in Bowman, Schultheiss, & Schumann's study, but expressed greater degrees of immersion and character attachment than low scoring individuals. I found that the players with the highest scores in

Harm/Care and Fairness/Reciprocity played video games at the extremes of the spectrum, as either completely good and moral or completely evil and immoral. The high scoring participants' narratives suggested that, whether they played as moral or immoral, they were immersed in the experience and attached to their characters. The players with high scores gave detailed accounts of their gameplay experiences, and seemed to truly share the cares that their characters in the game had. The high scoring participants seemed to display a level of immersion that the low scoring gamers did not achieve. The most moral participants wrote about how their experiences in games emotionally affected them. The most immoral scoring participants generally wrote about how their gaming experiences did not affect them, and they played in a way to further their game rating or complete as much of the game as possible. Immersion is the first facet that seems to separate the moral and immoral gamers.

Self-consistency in this context is an awareness of one's morality in relation to one's game playing. In my survey, in addition to completing the Moral Foundations Questionnaire to assess participants' moral foundations, players also recorded their perceived morality. The results showed no correlation between participants perceived morality and their actual moral foundations of Harm/Care and Fairness/Reciprocity. This indicates the overall low consistency between players' perceived moralities and their assessed moral foundations. Within their narratives, however, players with the highest scores in Harm/Care and Fairness/Reciprocity appeared to present more awareness of their own morality in relation to their gaming experiences than the low scoring participants. High scorers who played making mostly moral decisions remarked how difficult it was to make cruel decisions because of how it made them really feel, and how good helping in-game characters felt. High scorers who played mostly as evil reported that, while they enjoyed playing as evil, in real life they are very good and they could never make those same

choices in the real world. Low scoring participants on the other hand for the most part referenced how they have no emotional connection to their gaming, or they tried to excuse their in-game actions by pointing out gameplay mechanics and calling attention to the fact that they were just playing a game. My results indicated that while a player's real world morality did not necessarily preclude that person from playing a game as either kind or cruel, an individual's moral foundations were tied to that player's immersion in a game and character attachment. For players with greater moral maturity, their moral identities interacted meaningfully with their gameplay experience, regardless of how they played the RPG. Players with more immature morality appear to disengage their real world moral identities from their gameplay.

Expectations

In some respects the data collected during this study are consistent with my initial expectations. My expectation was that participants' understandings of how they perceived their own morality would differ from the measured assessment of their morality, and the lack of a significant correlation between perceived morality and assessed morality corroborated this belief. I also predicted that the moral foundations of Harm/Care and Fairness/Reciprocity would be correlated in some fashion with participants' moral play choices, and the results showed a significant, if weak, correlation between these moral foundations and participants' moral play styles.

Where the data diverged from my expectations, they did so in interesting and valuable ways. The data suggested that regardless of moral foundations scores, players engaged in both moral and immoral play styles. Finding that players played across the moral spectrum regardless of their moral identities defied my expectations that players with high moral foundations scores would play almost entirely as upstanding moral characters, while players with lower moral

foundations scores would play in more varied moral ways. The difference, however, between the players with the highest and lowest morality scores was actually in how players perceived themselves within the game. Players with higher moral foundations scores tended to be aware that they were playing the RPG as they would act in real life or they were playing it in a way that they would not engage with in real life. The players with the lowest moral foundation scores reported having no emotional connections to the game, or cited ways the experience was just a game and not related to their real lives or identities. Therefore, while I observed no actual differences in video game play choices across moral scores, I found noteworthy differences in how players with varying levels of morality engaged with their play choices.

Limitations of Instrumentation

I utilized an online mixed-methods survey for this study for a few main reasons. One reason was that many participants could access the survey due to its being online and informal. The survey also provided the opportunity to gather both simple quantitative answers through the use of likert scales, as well as more in-depth qualitative accounts about gaming experiences. While these are strengths in that the survey could reach many potential participants who could fill it out on their own schedules, this tactic also had limitations. While 51 people were eligible to be included in this study, many more people completed at least portions of the survey. Several possible reasons exist for so many partially completed surveys. One possibility is the lack of structure in the online survey, potentially leading participants to not complete pieces of the survey or giving up part of the way through. People were required to self-regulate their participation instead of being in a structured environment specifically tailored to filling out surveys, and distractions that prevented full concentration may have existed. Lastly, if

participants were confused about the questions or did not want to record full descriptive answers, I could not assist them since their participation was entirely anonymous and online.

Another difficulty with the survey was in the wording of the questions. Certain words used in the survey were laden with meaning, such as “good” and “evil,” and “moral” and “immoral.” I made an effort to counter these highly saturated words by using specific words from video games that were more specifically relevant, carry the same meaning, but are less culturally weighted, such as “paragon/renegade” and “light-side/dark-side.” I also tried using words like “kind” and “helpful” instead of “moral,” and “cruel” and “harmful” instead of “immoral.” The narrative questions were also designed to be broad in nature to limit the need for loaded words and to encourage more thinking from the participants; however, this wording may also have invited confused or less detailed answers. Therefore strategies used to mitigate loaded and leading questions may have also contributed to stunted answers and confusion.

One notable issue with the MFQ that may have influenced the results is the potential ambiguity of some of the questions. In the MFQ, participants were asked whether they agreed or disagreed with 15 different statements. Some of the statements left room for quite varied interpretations. One such statement read, “One of the worst things a person could do is hurt a defenseless animal.” A participant could interpret this as true, that hurting a defenseless animal is bad, but another participant could think that while bad, hurting animals is by no means one of the *worst* things. Further, a participant thinking of a child torturing a puppy might answer this differently than a participant who thinks of a farmer harvesting a chicken. For the MFQ question, “It can never be right to kill a human being,” 45% (n=23) reported they strongly or moderately disagreed. Perhaps so many participants took such a polarized and, in my opinion, questionable

moral stance because of the use of the word “never” in the question. This is just one example of how the MFQ’s wording may have influenced participants.

Generalizability and Bias

Are the results of this study generalizable outside of the participant population? Important facets of the participant population need to be kept in mind before generalizing to the greater public. For one, the participants in this study had to be United States citizens. Therefore the results may not be generalizable to individuals outside the United States. Second, though the results are potentially generalizable across gender and race, the demographic makeup of the study participants was fairly limited, with an overwhelming majority being white (78%, n=40) and male (82%, n=42). The white male demographic is not representative of the entire population of role-playing video gamers, and more research would need to be done to determine if this inhibits the generalizability of the study. Also, the participants in this study were predominantly avid and engaged video game consumers, which poses the question of whether the results from this study apply to more casual or newly engaged video game players.

My own biases in creating the survey and analyzing the results may have influenced this study. As the creator of the questions, my own understanding of choice in video games was important to the formation of the questions I asked. My understanding may be different from other individuals’, and thus impact how participants answered these questions. I piloted questions with friends who had relevant gaming experiences before submitting the survey for online data collection to make sure the questions were accurate and comprehensible. Additionally, my perspective when coding participants’ narratives and analyzing the results could be biased. When coding, I had to determine what categories phrases and narratives fell under within my coding scale, and relying on my own interpretation of narratives and codes

could have led to a biased analysis. Perhaps I could have reduced my bias by making a coding guide and having multiple third-party individuals code the narratives for me. My identity as an RPG video game player may also have influenced the question formation or analysis. Hopefully being self-aware of such a possible effect and having my survey reviewed by editors minimized this bias within the survey questions.

Implications and Recommendations

The results found in this study could be useful for clinicians working with clients who actively engage in role-playing video game play, as well as for gamers to gain insight into their moral development and how to address their moral maturity. Since this study proposes that understanding individuals' motivations when playing RPG video games can garner insight into individuals' moral identities and moral maturity, one could potentially address moral identity and development by examining gamers' motivations when playing RPGs. Role-playing video games could be used in social work practice to understand individual clients' moral selves by observing/discussing how they engage with RPGs. Encouraging clients to be self-reflective and perhaps showing clients how to engage with their in-game avatar or the virtual environment differently could help encourage moral development. The in-game decisions or moral play styles themselves are not necessarily indicators of players' moral identities and characteristics, but how players engage with the decisions they make in game and how they incorporate their own real world identity into their understanding of the gaming experience appears to reflect individuals' personal moral identities.

The implication for players could be that individuals with adequate moral maturity and understanding of their own real world moral identities could play games doing good or evil things, but still recognize the ways their own moral identities engage with their virtual actions.

Paradoxically, immersion within the virtual gaming environment for a morally mature person appears to actually encourage her or his real world positive moral identity, regardless of moral play style. A person who is not morally mature does not necessarily see how her or his identity is involved in the gameplay, which can divorce her or his individual morality from the virtual experiences, leading to no moral impact, positive or negative, of the interaction with the game. Players who are aware that their moral identities can be encouraged through relating their play to their real identities could use this knowledge to augment their play and potentially foster more positive moral characteristics. It is also possible that parents could use the knowledge that video games can be used to stimulate moral identities with their children, perhaps supporting their children with video game play as they grow and develop a more consistent moral identity.

I also recommend redefining what self-consistency portends in terms of video gaming. Self-consistency as described by theories of morality tends to mean completing actions and engaging in behaviors that are consistent with one's internalized moral identity. Video games provide a medium for engaging in behaviors that can be disapproved of or forbidden in the real world, meaning self-consistency in the traditional sense does not necessarily apply to video game play. Instead, self-consistency in relation to an individual playing in virtual environments could be redefined as being consciously reflective when one's actions in an RPG video game do or do not match with one's real world moral identity. Therefore participants in this study who made cruel or evil decisions, but recognized how these choices were related to their real world identities, displayed self-consistency. Players who were unaware of how their in-game choices related to them as real human beings did not demonstrate self-consistency. Redefining the meaning of self-consistency in terms of virtual play could become valuable as virtual reality becomes a greater part of our lives.

Future research should focus on the longitudinal quality of video game play. In most of the studies concerning video games and morality, researchers created short-term experiments to gauge participants' emotional and moral reactions to short, staged video game experiences (Greitemeyer & Osswald, 2010; Hartmann, et al., 2010; Hartmann & Vorderer, 2010; Weaver & Lewis, 2012). Unlike most other studies, my study focused specifically on players' experiences garnered from their authentic video game play sessions. Using my study, I determined that key features of morality and video game play are the players' immersion within games and the players' character attachments to their in-game avatars. Short-term experiments cannot possibly encompass the effect of these concepts, so creating a long-term experiment that could account for immersive gameplay could uncover results excluded from limited experiments.

Another important facet that should be examined is what differences, if any, exist between actively involved video game players and more casual players, or people who do not play video games at all. My study examined individuals who avidly play and enjoy video games, but other studies have not distinguished between non-players and frequent players. If immersion and character attachment have a significant effect on how players perceive their real world morality in terms of their video game play, then the possibility exists that individuals who already have experience engaging with video games may morally engage with the virtual play differently than those who do not generally participate in video games.

Conclusion

The findings of this study suggest that one's internalized morality does not necessarily indicate one's moralized play choices in single-player RPG video games, but instead indicates how one understands her or his own gaming experience. The ability to self-reflect and examine the ways one's identity is consistent or inconsistent with that of the character one is playing

indicates one's level of moral maturity. A relationship exists between one's moral maturity and one's ability to become immersed in the virtual game environment, which can be expressed by one's ability to empathize with one's in-game avatar. As the frequency of video game play continues to increase, individuals and social workers would benefit from learning about the ways morality and mental health interact with virtual experiences. The research in this study is one step on the road to comprehending the interactions between individuals' moral identities and their play choices in single-player role-playing video games.

References

- Bem, D. J. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review*, *74*(3), 183-200.
- Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 6, pp. 1–62). New York, NY: Academic Press.
- Blasi, A. (2004). Moral functioning: Moral understanding and personality. In D. K. Lapsley & D. Narvaez (Eds), *Moral development, self, and identity* (pp. 335-348). Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.
- Bowman, N., Schultheiss, D., & Schumann, C. (2012). 'I'm attached, and I'm a good guy/gal!': How character attachment influences pro- and anti-social motivations to play massively multiplayer online role-playing games. *Cyberpsychology, Behavior & Social Networking*, *15*(3), 169-174. doi:10.1089/cyber.2011.0311
- Coulson, M., Barnett, J., Ferguson, C. J., & Gould, R. L. (2012). Real feelings for virtual people: emotional attachments and interpersonal attraction in video games. *Psychology of Popular Media Culture*, *1*(3), 176-184. doi:10.1037/a0028192
- Darley, J. M., & Batson, C. D. (1973). From Jerusalem to Jericho: A study of situational and dispositional variables in helping behavior. *Journal of Personality & Social Psychology*, *27*:100–8
- Epley, N., Waytz, A., & Cacioppo, J. T. (2007). On seeing human: A three-factor theory of anthropomorphism. *Psychological Review*, *114*(4), 864-886. doi:10.1037/0033-295X.114.4.864
- Gert, B. (2012). The definition of morality. In E. Zalta (Ed.), *The Stanford encyclopedia of philosophy*. <http://plato.stanford.edu/archives/fall2012/entries/morality-definition/>>.

- Graham, J., Haidt, J., & Nosek, B. A. (2008, July). The moral foundations questionnaire.
Retrieved from <http://www.moralfoundations.org/questionnaires>
- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Psychology and Social Psychology, 96* (5),1029-1046. doi: 10.1037/a0015141
- Greitemeyer, T. (2013). Effects of playing video games on perceptions of one's humanity. *Journal of Social Psychology, 153*(4), 499-514.
- Greitemeyer, T., & Osswald, S. (2010). Effects of prosocial video games on prosocial behavior. *Journal of Personality and Social Psychology, 98*(2), 211-221. doi:10.1037/a0016997
- Hartmann, T., Toz, E., & Brandon, M. (2010). Just a game? Unjustified virtual violence produces guilt in empathetic players. *Media Psychology, 13*(4), 339-363.
doi:10.1080/15213269.2010.524912
- Hartmann, T., & Vorderer, P. (2010). It's okay to shoot a character: Moral disengagement in violent video games. *Journal of Communication, 60*(1), 94-119. doi:10.1111/j.1460-2466.2009.01459.x
- Khoo, A. (2012). Video games as moral educators? *Asia Pacific Journal of Education, 32*(4), 416-429. doi: 10.1080/02188791.2012.738638
- Kozlov, M. D., & Johansen, M. K. (2010). Real behavior in virtual environments: psychology experiments in a simple virtual-reality paradigm using video games. *Cyberpsychology, Behavior & Social Networking, 13*(6), 711-714. doi:10.1089/cyber.2009.0310
- Latane, B., & Rodin, J. (1969). A lady in distress: Inhibiting effects of friends and strangers on bystander intervention. *Journal of Experimental Social Psychology, 5*:189–202.

- Narvaez, D., & Lapsley, D. K. (2009) Moral identity, moral functioning, and the development of moral character. In D. M. Bartels, C. W. Bauman, L. J. Skitka, & D. L. Medin (Eds.), *Moral judgment and decision making* (pp. 238-265). Amsterdam, Holland: Elsevier Inc., Academic Press.
- Reynolds, S. J., & Ceranic, T. L. (2007). The effects of moral judgment and moral identity on moral behavior: An empirical examination of the moral individual. *Journal of Applied Psychology, 92*(6), 1610-1624. doi:10.1037/0021-9010.92.6.1610
- Robak, R. W. (2001). Self-definition in psychotherapy: Is it time to revisit self-perception theory? *North American Journal of Psychology, 3*(3), 529.
- Stets, J. E., & Carter, M. J. (2011). The moral self: Applying identity theory. *Social Psychology Quarterly, 74*(2), 192-215.
- Walker, L. J. (2004). Gus in the gap: Bridging the judgment-action gap in moral functioning. In D. K. Lapsley & D. Narvaez (Eds), *Moral development, self, and identity* (pp. 1-20). Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.
- Weaver, A. J., & Lewis, N. (2012). Mirrored morality: An exploration of moral choice in video games. *Cyberpsychology, Behavior & Social Networking, 15*(11), 610-614. doi:10.1089/cyber.2012.0235
- Yee, N., & Bailenson, J. N. (2009). The difference between being and seeing: The relative contribution of self-perception and priming to behavioral changes via digital self-representation. *Media Psychology, 12*(2), 195-209. doi:10.1080/15213260902849943

APPENDIX A

Moral Foundations Questionnaire

Part 1. When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Please rate each statement using this scale:

[0] = not at all relevant (This consideration has nothing to do with my judgments of right and wrong)

[1] = not very relevant

[2] = slightly relevant

[3] = somewhat relevant

[4] = very relevant

[5] = extremely relevant (This is one of the most important factors when I judge right and wrong)

- _____ 1. Whether or not someone suffered emotionally
- _____ 2. Whether or not some people were treated differently than others
- _____ 3. Whether or not someone's action showed love for his or her country
- _____ 4. Whether or not someone showed a lack of respect for authority
- _____ 5. Whether or not someone violated standards of purity and decency
- _____ 6. Whether or not someone was good at math
- _____ 7. Whether or not someone cared for someone weak or vulnerable
- _____ 8. Whether or not someone acted unfairly
- _____ 9. Whether or not someone did something to betray his or her group
- _____ 10. Whether or not someone conformed to the traditions of society
- _____ 11. Whether or not someone did something disgusting
- _____ 12. Whether or not someone was cruel
- _____ 13. Whether or not someone was denied his or her rights
- _____ 14. Whether or not someone showed a lack of loyalty
- _____ 15. Whether or not an action caused chaos or disorder
- _____ 16. Whether or not someone acted in a way that God would approve of

Part 2. Please read the following sentences and indicate your agreement or disagreement:

[0]	[1]	[2]	[3]	[4]	[5]
Strongly disagree	Moderately disagree	Slightly disagree	Slightly agree	Moderately agree	Strongly agree

- _____ 17. Compassion for those who are suffering is the most crucial virtue.
- _____ 18. When the government makes laws, the number one principle should be ensuring that everyone is treated fairly.
- _____ 19. I am proud of my country's history.
- _____ 20. Respect for authority is something all children need to learn.
- _____ 21. People should not do things that are disgusting, even if no one is harmed.
- _____ 22. It is better to do good than to do bad.
- _____ 23. One of the worst things a person could do is hurt a defenseless animal.

- _____ 24. Justice is the most important requirement for a society.
- _____ 25. People should be loyal to their family members, even when they have done something wrong.
- _____ 26. Men and women each have different roles to play in society.
- _____ 27. I would call some acts wrong on the grounds that they are unnatural.
- _____ 28. It can never be right to kill a human being.
- _____ 29. I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing.
- _____ 30. It is more important to be a team player than to express oneself.
- _____ 31. If I were a soldier and disagreed with my commanding officer's orders, I would obey anyway because that is my duty.
- _____ 32. Chastity is an important and valuable virtue.

To score the MFQ yourself, you can copy your answers into the grid below. Then add up the 6 numbers in each of the five columns and write each total in the box at the bottom of the column. The box then shows your score on each of 5 psychological "foundations" of morality. Scores run from 0-30 for each foundation. (Questions 6 and 22 are just used to catch people who are not paying attention. They don't count toward your scores).

<i>Question #</i>	<i>Your Response</i>	<i>Question #</i>	<i>Your Response</i>	<i>Question #</i>	<i>Your Response</i>	<i>Question #</i>	<i>Your Response</i>	<i>Question #</i>	<i>Your Response</i>		
1		2		3		4		5		6	
7		8		9		10		11			
12		13		14		15		16			
17		18		19		20		21		22	
23		24		25		26		27			
28		29		30		31		32			

Harm /
Care

Fairness /
Reciprocity

In-group /
Loyalty

Authority /
Respect

Purity /
Sanctity

The average politically moderate American's scores are: 20.2, 20.5, 16.0, 16.5, and 12.6.

Liberals generally score a bit higher than that on Harm/care and Fairness/reciprocity, and much lower than that on the other three foundations. Conservatives generally show the opposite pattern.

The Moral Foundations Questionnaire (MFQ-30, July 2008) by Jesse Graham, Jonathan Haidt, and Brian Nosek. For more information about Moral Foundations Theory, scoring this form, or interpreting your scores, see: www.MoralFoundations.org. To take this scale online and see how you compare to others, go to www.YourMorals.org

APPENDIX B

Informed Consent



Consent to Participate in a Research Study
Smith College School for Social Work • Northampton, MA

.....
Title of Study: Virtual decision-making in role-playing games

Investigator(s): Samuel Flescher

Smith College School of Social Work

(413) 585-7974

sflescher@smith.edu
.....

Introduction

- You are being asked to participate in a research study exploring experiences with making choices that affect character development and story progression in role-playing games.
- You were selected as a possible participant because of your experience playing role-playing video games in which making diverging narrative choices is a fundamental game mechanic. You must be 18 or older to participate in this study, as well as be a US citizen.
- We ask that you read this form before agreeing to be in this study.

Purpose of Study

- The purpose of this study is to explore how players experience making narrative choices in role-playing video games, and how those choices relate to players' personal identities.
- This study is being conducted as a research requirement for my master's in social work degree.
- Ultimately, this research may be published or presented at professional conferences.

Description of the Study Procedures

- If you agree to be in this study, you will be asked to do the following things: Complete survey questions about your experiences making narrative choices in role-playing games, and fill out a foundations questionnaire about your personal beliefs. The entire survey will take about 15 minutes to complete, with about 10 minutes for the questions about your gaming experiences, and 5 minutes to complete the questionnaire.

Risks/Discomforts of Being in this Study

- There are no reasonable foreseeable (or expected) risks associated with this study, however if you experience discomfort with anything within this study you may seek support or guidance from the following place:
 - <http://www.naswma.org/?page=35>
 - <http://www.crisischat.org/>

Benefits of Being in the Study

- The potential benefits of participation are having an opportunity to explore role-playing experiences that have made an impact on you, gaining some insight into your experience of making choices in role-playing games, and contributing to the greater knowledge of research into video games and identity.
- The benefits to social work/society are an increased understanding of players' experiences making choices in video games, and gaining insight into the potential relationship between gamers' identities and their in-game choices.

Confidentiality

- This study is anonymous. We will not be collecting or retaining any information about your identity.

Payments/gift

- You will not receive any financial payment for your participation.

Right to Refuse or Withdraw

- The decision to participate in this study is entirely up to you. You may refuse to take part in the study at any time before submitting this survey without affecting your relationship with the researchers of this study or Smith College. Your decision to refuse will not result in any loss of benefits (including access to services) to which you are otherwise entitled. You have the right not to answer any single question, as well as to withdraw completely before submitting the survey. If you choose to not answer any single question, your information collected may not be used in the data analysis of this study. If you choose to withdraw, I will not use any of your information collected for this study.

Right to Ask Questions and Report Concerns

- You have the right to ask questions about this research study and to have those questions answered by me before, during or after the research. If you have any further questions about the study, at any time feel free to contact me, Sam Flescher, through my email at sflescher@smith.edu, or message me through Reddit to TheTsalmaVet. If you would like a summary of the study results, one will be sent to you once the study is completed. If you have any other concerns about your rights as a research participant, or if you have any problems as a result of your participation, you may contact the Chair of the Smith College School for Social Work Human Subjects Committee at (413) 585-7974.

Consent

- Checking “I Agree” below indicates that you have decided to volunteer as a research participant for this study, and that you have read and understood the information provided above.

I Agree

I Disagree

APPENDIX C

Survey

To participate in this study you must be 18 or older.

Are you 18 or older?

Yes No

To participate in this study you must be a US citizen.

Are you a US citizen?

Yes No

<<Previous Next>>

Title of Study: Virtual decision-making in role-playing games

Investigator(s): Samuel Flescher

Smith College School of Social Work

(413) 585-7974

sflescher@smith.edu

Introduction

- You are being asked to participate in a research study exploring experiences with making choices that affect character development and story progression in role-playing games.
- You were selected as a possible participant because of your experience playing role-playing video games in which making diverging narrative choices is a fundamental game mechanic. You must be 18 or older to participate in this study, as well as be a US citizen.
- We ask that you read this form before agreeing to be in this study.

Purpose of Study

- The purpose of this study is to explore how players experience making narrative choices in role-playing video games, and how those choices relate to players' personal identities.
- This study is being conducted as a research requirement for my master's in social work degree.
- Ultimately, this research may be published or presented at professional conferences.

Description of the Study Procedures

- If you agree to be in this study, you will be asked to do the following things: Complete survey questions about your experiences making narrative choices in role-playing games, and fill out a foundations questionnaire about your personal beliefs. The entire survey will take about 15 minutes to complete, with about 10 minutes for the questions about your gaming experiences, and 5 minutes to complete the questionnaire.

Risks/Discomforts of Being in this Study

- There are no reasonable foreseeable (or expected) risks associated with this study, however if you experience discomfort with anything within this study you may seek support or guidance from the following place:
- <http://www.naswma.org/?page=35>
- <http://www.crisischat.org/>

Benefits of Being in the Study

- The potential benefits of participation are having an opportunity to explore role-playing experiences that have made an impact on you, gaining some insight into your experience of making choices in role-playing games, and contributing to the greater knowledge of research into video games and identity.
- The benefits to social work/society are an increased understanding of players' experiences making choices in video games, and gaining insight into the potential relationship between gamers' identities and their in-game choices.

Confidentiality

- This study is anonymous. I will not be collecting or retaining any information about your identity.

Payments/gift

- You will not receive any financial payment for your participation.

Right to Refuse or Withdraw

• The decision to participate in this study is entirely up to you. You may refuse to take part in the study at any time before submitting this survey without affecting your relationship with the researchers of this study or Smith College. Your decision to refuse will not result in any loss of benefits (including access to services) to which you are otherwise entitled. You have the right not to answer any single question, as well as to withdraw completely before submitting the survey. If you choose to not answer any single question, your information collected may not be used in the data analysis of this study. If you choose to withdraw, you must do so before clicking the final submit button at the end of the survey as the survey is anonymous and I will be unable to identify individual's responses. If you choose to withdraw, I will not use any of your information collected for this study.

Right to Ask Questions and Report Concerns

• You have the right to ask questions about this research study and to have those questions answered by me before, during or after the research. If you have any further questions about the study, at any time feel free to contact me, Sam Flescher, through my email at sflescher@smith.edu, or message me through Reddit to [TheTsalmaVet](#). If you would like a summary of the study results, you may confidentially message me through Reddit or Facebook and one will be sent to you once the study is completed. If you have any other concerns about your rights as a research participant, or if you have any problems as a result of your participation, you may contact the Chair of the Smith College School for Social Work Human Subjects Committee at (413) 585-7974.

Consent

Checking "I Agree" below indicates that you have decided to volunteer as a research participant for this study, and that you have read and understood the information provided above.

I Agree

I Disagree

<<Previous Next>>

Gaming Habits

1. In a typical week, how many hours do you play video games?

0-2 hour(s)

3-6 hours

7-10 hours

11-15 hours

16-20 hours

21+ hours

2. In a typical week, how many hours do you play RPGs?

0-2 hour(s)

3-6 hours

7-10 hours

11-15 hours

16-20 hours

21+ hours

<<Previous Next>>

Role-Playing Games

3. Branching decision-making occurs when a game offers players multiple different dialogue options during character conversations, and different choices of actions that affect the game's narrative. Which RPG games or franchises have you played in which branching decision-making is a game mechanic? *Select all that apply:*

- Mass Effect
- Dragon Age
- Star Wars: Knights of the Old Republic
- Star Wars: The Old Republic
- Fable
- Fallout
- The Witcher
- Other: _____

<<Previous Next>>

4. When you play an RPG in which you can choose to play as “good” (light-side, paragon, etc.) or “evil” (dark-side, renegade, etc.), which do you prefer to play as?

I always play as
good

I usually play as
good

I play as both
equally

I usually play as
evil

I always play as
evil

<<Previous Next>>

5. Write about a time in an RPG where you were asked to make a choice, and you chose to do something mean or self-serving.

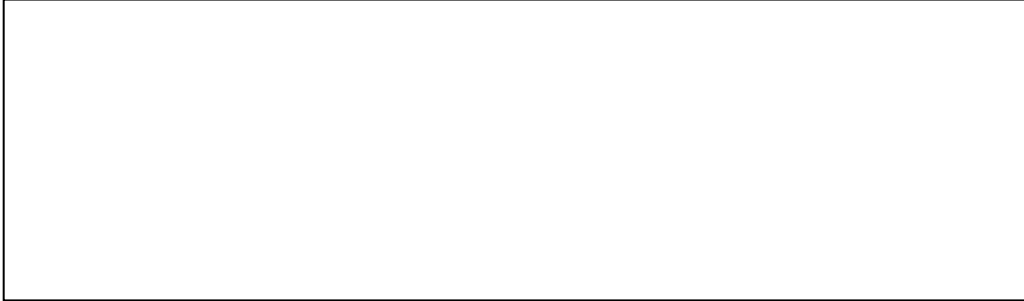
<<Previous Next>>

6. How did you feel after making that choice?

7. Is there anything else you would like to add?

<<Previous Next>>

8. Write about a time in an RPG where you were asked to make a choice, and you chose to do something kind or helpful.

A large, empty rectangular box with a thin black border, intended for the student to write their response to the prompt above.

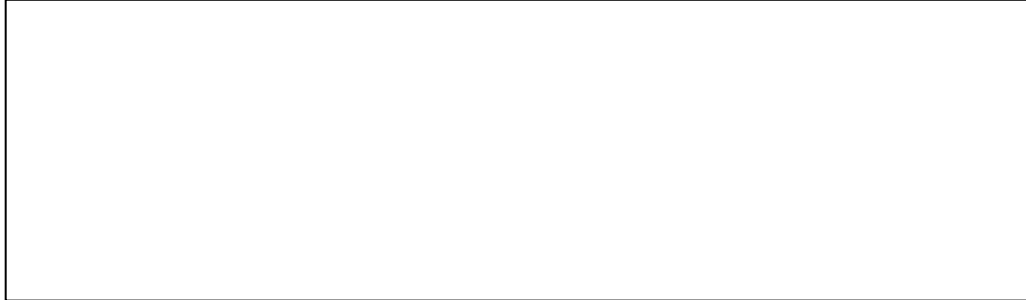
<<Previous Next>>

9. How did you feel after making that choice?

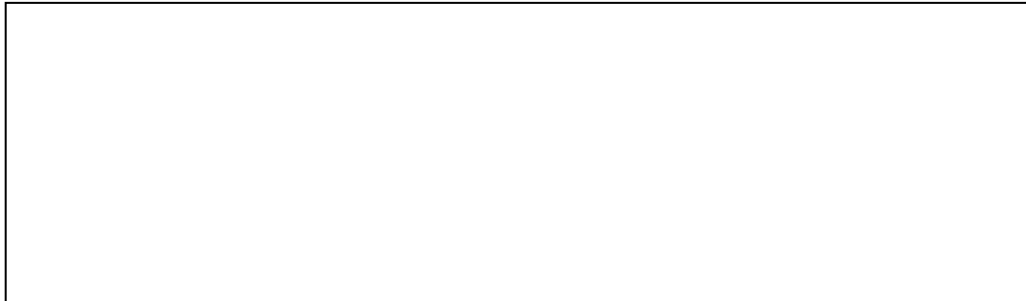
10. Is there anything else you would like to add?

<<Previous Next>>

11. Describe a time in an RPG when the game forced you to make a decision you did not want to make.



12. How did you feel about the decision you were asked to make?



<<Previous Next>>

The next two pages will ask a series of questions about what is important to you as an individual when it comes to making decisions in the real world. This questionnaire is about what your *real world* decisions are based on, not necessarily your video game decisions.

<<Previous Next>>

Part 1. When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Please rate each statement using this scale:

[0] = not at all relevant (This consideration has nothing to do with my judgments of right and wrong)

[1] = not very relevant

[2] = slightly relevant

[3] = somewhat relevant

[4] = very relevant

[5] = extremely relevant (This is one of the most important factors when I judge right and wrong)

0 - Not at all relevant	1 - Not very relevant	2 - Slightly relevant	3 - Somewhat relevant	4 - Very relevant	5 - Extremely relevant
-------------------------	-----------------------	-----------------------	-----------------------	-------------------	------------------------

1. Whether or not someone suffered emotionally _____
2. Whether or not some people were treated differently than others _____
3. Whether or not someone's action showed love for his or her country _____
4. Whether or not someone showed a lack of respect for authority _____
5. Whether or not someone violated standards of purity and decency _____
6. Whether or not someone was good at math _____
7. Whether or not someone cared for someone weak or vulnerable _____
8. Whether or not someone acted unfairly _____
9. Whether or not someone did something to betray his or her group _____
10. Whether or not someone conformed to the traditions of society _____
11. Whether or not someone did something disgusting _____
12. Whether or not someone was cruel _____
13. Whether or not someone was denied his or her rights _____
14. Whether or not someone showed a lack of loyalty _____
15. Whether or not an action caused chaos or disorder _____
16. Whether or not someone acted in a way that God would approve of _____

<<Previous Next>>

Part 2. Please read the following sentences and indicate your agreement or disagreement:

0 - Strongly disagree	1 - Moderately disagree	2 - Slightly disagree	3 - Slightly agree	4 - Moderately agree	5 - Strongly agree
-----------------------	-------------------------	-----------------------	--------------------	----------------------	--------------------

- 17. Compassion for those who are suffering is the most crucial virtue. _____
- 18. When the government makes laws, the number one principle should be ensuring that everyone is treated fairly. _____
- 19. I am proud of my country's history. _____
- 20. Respect for authority is something all children need to learn. _____
- 21. People should not do things that are disgusting, even if no one is harmed. _____
- 22. It is better to do good than to do bad. _____
- 23. One of the worst things a person could do is hurt a defenseless animal. _____
- 24. Justice is the most important requirement for a society. _____
- 25. People should be loyal to their family members, even when they have done something wrong. _____
- 26. Men and women each have different roles to play in society. _____
- 27. I would call some acts wrong on the grounds that they are unnatural. _____
- 28. It can never be right to kill a human being. _____
- 29. I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing. _____
- 30. It is more important to be a team player than to express oneself. _____
- 31. If I were a soldier and disagreed with my commanding officer's orders, I would obey anyway because that is my duty. _____
- 32. Chastity is an important and valuable virtue. _____

<<Previous Next>>

13. How moral or immoral do you consider yourself?

Very Moral

Somewhat Moral

Neutral

Somewhat
Immoral

Very Immoral

<<Previous Next>>

14. How old are you?

Age _____

15. What gender do you identify as?

Male

Female

Transgender

Prefer not to answer

Other _____

16. What race/ethnicity do you identify as? *Select all that apply:*

African-American

Asian/Pacific Islander

White

Latino or Hispanic

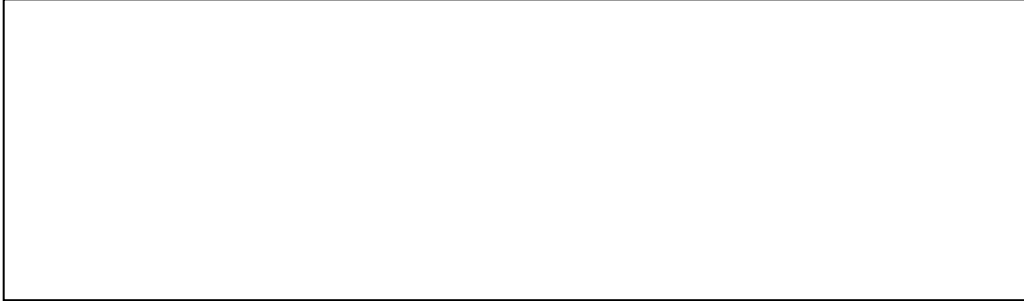
Native American

Prefer not to answer

Other _____

<<Previous Next>>

17. Thank you for taking this survey. Use the space provided to leave any questions or comments you may have after taking this survey.



Finish

APPENDIX D

Participant Recruitment Letter

Hi everyone!

I am currently working on a study for my master's degree in social work about decision-making in RPGs and if/how players' choices in RPGs are connected to players' identities. I need participants for my survey who are willing to write about experiences they have had making choices in RPGs that have narrative decision-making as a key component.

The purpose of my study is to explore how players understand the choices they make when playing RPGs, and in what ways, if any, those choices are related to the player's own identity. The survey will take you about 15 minutes to complete, and contains a short section of questions asking about your experiences making choices in RPGs as well as a short questionnaire about personality traits.

You may be eligible to participate in my study if you have played RPGs where narrative decision-making is a key feature, such as Mass Effect, Dragon Age, KOTOR, and many others. You must also be 18 or older, and be a US citizen to participate.

If you are interested in helping me with my study, you can click on the link to surveymonkey at the bottom of this post to access it. If you have any questions you can send me a message. This study is entirely voluntary and anonymous, so once you submit your survey I won't be able to match answers to participants. However, I will leave a space at the end of the survey for you to air any anonymous comments you may have.

Thanks so much for reading my post, and I hope you take the time to fill out my survey and help me with my research!

<https://www.surveymonkey.com/s/rpgdecisionmaking>

APPENDIX E

HSR Approval Letter



School for Social Work
Smith College
Northampton, Massachusetts 01063
T (413) 585-7950 F (413) 585-7994

December 9, 2014
Samuel Flescher

Dear Sam,

You did a very nice job on your revisions. Your project is now approved by the Human Subjects Review Committee.

Please note the following requirements:

Consent Forms: All subjects should be given a copy of the consent form.

Maintaining Data: You must retain all data and other documents for at least three (3) years past completion of the research activity.

In addition, these requirements may also be applicable:

Amendments: If you wish to change any aspect of the study (such as design, procedures, consent forms or subject population), please submit these changes to the Committee.

Renewal: You are required to apply for renewal of approval every year for as long as the study is active.

Completion: You are required to notify the Chair of the Human Subjects Review Committee when your study is completed (data collection finished). This requirement is met by completion of the thesis project during the Third Summer.

Congratulations and our best wishes on your interesting study.

Sincerely,

A handwritten signature in black ink, appearing to read 'Elaine Kersten'.

Elaine Kersten, Ed.D.
Co-Chair, Human Subjects Review Committee

CC: Mary Beth Averill, Research Advisor

APPENDIX F

Tables

Table 1

Perceived Real World Morality vs. Moral Foundations

		<u>Perceived Real World Morality</u>	
Spearman's rho	Harm/Care Score (0=not at all relevant to individuals morality to 30=extremely relevant)	Correlation Coefficient Sig. (2-tailed) N	-.258 .070 50
	Fairness/Reciprocity Score (0=not at all relevant to individuals morality to 30=extremely relevant)	Correlation Coefficient Sig. (2-tailed) N	.079 .593 48
	In-Group/Loyalty Score (0=not at all relevant to individuals morality to 30=extremely relevant)	Correlation Coefficient Sig. (2-tailed) N	-.038 .792 50
	Authority/Respect Score (0=not at all relevant to individuals morality to 30=extremely relevant)	Correlation Coefficient Sig. (2-tailed) N	-.287* .041 51
	Purity/Sanctity Score (0=not at all relevant to individuals morality to 30=extremely relevant)	Correlation Coefficient Sig. (2-tailed) N	-.416** .002 51

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Table 2

In-Game Moral Play Style vs. Moral Foundations

		In-Game Moral Play Style	
Spearman's rho	Harm/Care Score (0=not at all relevant to individuals morality to 30=extremely relevant)	Correlation Coefficient	-.286*
		Sig. (2-tailed)	.044
		N	50
	Fairness/Reciprocity Score (0=not at all relevant to individuals morality to 30=extremely relevant)	Correlation Coefficient	-.288*
		Sig. (2-tailed)	.047
	N	48	
	In-Group/Loyalty Score (0=not at all relevant to individuals morality to 30=extremely relevant)	Correlation Coefficient	-.215
		Sig. (2-tailed)	.135
		N	50
	Authority/Respect Score (0=not at all relevant to individuals morality to 30=extremely relevant)	Correlation Coefficient	-.048
		Sig. (2-tailed)	.737
		N	51
	Purity/Sanctity Score (0=not at all relevant to individuals morality to 30=extremely relevant)	Correlation Coefficient	-.149
		Sig. (2-tailed)	.298
		N	51

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).