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Ethical Perceptions and Actions in Gaming

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Abstract

The present study explored how individuals perceive actions in gaming that contain ethical components, whether they have ever engaged in those behaviors and how judgments of ethical actions in gaming relate to participant personality. Participants completed a 16-item survey, which measured their perception of the ethics of gaming behaviors, such as buying a hack or lying to another player. Participants were also asked to indicate for each item whether or not they had ever engaged in that behavior. Results indicated that participants were able to judge the ethical level of different gaming behaviors with lying to other players and unauthorized access to servers being rated as most unethical. Furthermore, self-reports of engagement in unethical activities were fairly low. When ethical rating and action scores were correlated with personality characteristics using the Cattell 16PF[1], the only correlation to reach significance showed that participants higher in rule consciousness rated the ethical gaming questions as more unethical overall than their less rule-conscious peers. Given the extent and popularity of gaming in today's world, it is important to understand how individuals perceive the gaming culture. One aspect of this culture that merits further examination is ethical behavior in gaming.

Introduction

The popular perception that video game players are a relatively small segment of the population comprised of primarily younger, teenage boys is far from the truth. In fact, 2014 data from the Entertainment Software Association (ESA)[2] indicates that 59% of people in the US play video games. Furthermore, women make up nearly half of this group and the average age for all gamers is 31 years old. In addition to a more diverse demographic, the overall number of players has been steadily increasing. For example, in 2012 Macchiarella estimated that 135 million individuals in the US played some form of video game, up from 56 million players in 2008.[3] Furthermore, Macchiarella reported that a high percentage of players prefer Facebook-based games, or games that are free to play. ESA labels these casual or social games and estimates between 2012 and 2013 their popularity increased 55%, making this the most popular genre among the most frequent gamers.[2]

With participation levels in gaming so high, it is hardly surprising that researchers are interested in the effect that gaming has on behavior. A majority of this research focuses on the negative outcomes of playing video games such as gaming addiction[4]or the often-assumed correlation between gaming and violent behavior.[5,6,7]For example, in 2007 Ferguson conducted a meta-analysis of the literature to evaluate the connection between video game violence and aggressive behavior.[8]Although he did not find support for the conclusion that playing violent video games leads to aggression, results suggested game playing was associated with higher visuospatial cognition. This second finding highlights another area of research interest: the potential positive outcomes associated with gaming. In addition to the benefits of using games in education,[9.10] others, Like Ferguson, have found a positive effect of video games on visuospatial skills.[11.,12,13]Another,seemingly paradoxical, finding is that gamers who engage in team-oriented first person shooter games may actually exhibit higher altruistic behavior after gameplay than other players.[14] It is clear that gaming is a complex behavior and, as such, we have only a limited understanding of the personality and behaviors of gamers.

One area that has received sparse empirical focus is the ethical behavior of gamers. In the present study we investigated this topic by evaluating how gamers perceive, and the extent to which they engage in, unethical gameplay. Second, we examined possible personality correlates of unethical gameplay. Before describing our study specifically, we briefly review findings on ethics in video game play.

Ethics and Gaming

Ethics within gaming can be studied across a number of different contexts. There is a robust literature discussing the ethical and moral elements of games within the discipline of philosophy.[15,16,17,18,19,20,21,22] This literature addresses questions of morality, ethics and honor within games. The literature in this vein also assumes that games are designed with rules and affordances, but only when the player immerses him/herself in the social dynamic of the game do ethical choices manifest themselves in either acceptance of legitimate immoral or unethical actions within a game's rule structure, or adherence to,or disregard for, rules that maintain ethical boundaries.

A second area of literature addresses unethical behavior in gaming from a game developer point of view.[23,24,25] This literature assumes that: a) games have rules created by game developers and should be played according to those rules, b) cheating by breaking the rules or the code of ethics in a game is wrong and c) developers must be diligent in understanding cheating and working to develop best practices to defend against cheating in a game.

The field of psychology provides the last perspective in the study of ethics in gaming. This perspective, which guided the present study, seeks to understand gamers, and their motives and behaviors. It is assumed that a complex interaction between individual personality, social dynamics and the nature of the game itself creates greater or lesser opportunities for cheating or unethical behavior in gameplay. Psychological studies can focus on a single element of the equation (e.g., player personality, player experience, single-player versus multi-player mode, game difficulty, etc.) to garner better understanding of the phenomenon of cheating, or simultaneously vary multiple elements together (e.g., novice player with high need for group acceptance). The challenge for the psychological study of unethical behavior in games is that there are an unlimited number of potential variables that can combine to elicit unethical behaviors, and a rapidly growing number of games and genres that can also influence the manifestation of unethical actions.

Of relevance to the present work is a study that examined cheating behaviors in video gamers. In this study, players were asked to report three reasons why they had cheated in gameplay in the past.[26]Results of the analysis showed that cheating to progress toward completion in a game and cheating to gain advantage over another player were the top motives for respondents. Both of these motives for cheating reflect a competitive drive in players focusing either on the self-imposed challenge to succeed in a game or on the more external drive to best another individual in a personal contest.

Personality and Gaming

The present study also addressed how player personality influenced gaming ethics. Early research on the relationship between personality and gaming focused on identifying how personality affects frequency of game play.[27,28] More recent work continues this focus but has expanded to include preferences for different types of games[29] and game-playing style.[30]

Much of this research employs standardized measures of personality with subjective reports of gaming frequency and preference. Tests have been developed to classify individuals into different gaming character types. Bartle published an early work that discussed gaming character types based on gamer preferences.[31] In Bartle's theory, players are classified into diamonds, spades, hearts and clubs, corresponding to their preferences for social interaction versus environment exploration and their preference for working with others or working alone in a game. Andreasen and Downey used Bartle's theory to create widely used test of gaming character by re-labeling Bartle's original types as achiever's, explorers, socializers and killers.[32] The prevailing thought is that player "type" determines what games a player is drawn to and the typical actions or behaviors the player may exhibit during gameplay.

Personality and gaming research has taken two different directions. The first line of research focused on how personality traits related to preferences for game styles or game-related behaviors. Carroll and Carolin studied college students who were involved in gaming.[33] These students completed surveys about their game playing and also completed the 16 Personality Factor Questionnaire (16PF), a measure of personality.[1] Results of this study indicated no personality differences between "light" and "heavy" involvement gamers. Similar findings were reported by Gibb et al.[27]

Two recent studies have also examined personality and its relationship to gaming preferences. Sukeena, Moore and Minear related the Big 5 factors of personality (i.e., openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism) to motivational gaming preferences.[34] In this study, six types of gamers were identified based on the participants' reasons for gaming and gaming preferences. The types were social gamers, additive gamers, problem solvers, immersive gamers, competitive gamers and achievement-based gamers. When the relationship between gamer type and personality was examined, negative correlations were reported between neuroticism and social gaming, as well as between agreeableness and conscientiousness and addictive gaming. Positive correlations were reported between openness and problem solving and immersive gaming, as well as between agreeableness and immersive gaming. A similar study by Bean and Groth-Marnat used the Big 5 Inventory to determine if player personality related to game-playing style[30]. This study used a large sample of World of Warcraft (WoW) players and compared their personality characteristics across different player styles and game roles. While female WoW players did score significantly higher on the traits of agreeableness, neuroticism and openness, there were few differences between players based on what role they assumed. Differences in personality were found across playing style. Players who used a player-versus-player style scored higher on extraversion than players who used a role-playing style. Role-players scored higher on neuroticism and openness than those whose styles were player-versus-player or player-versus- environment based. Last, the player-versus-environment gamers had higher conscientiousness scores than the other player types.

Additional research by Chory and Good boy also supports a connection between personality and game preference, particularly for violent video games.[29]They showed participants higher in openness but lower in agreeableness more frequently played violent games. Furthermore, those who reported a preference for violent video games were more open and extroverted, but less agreeable and neurotic.

The second line of research linking personality to gaming behavior has focused on the darker side of gaming by studying how variables such as addiction, anxiety and moral disengagement relate to gaming activity. Via, Frederick, Bradshaw-Hoppock and Kring showed that players with higher psychopathy scores committed significantly more crimes against people (versus crimes against property) than those with lower psychopathy scores when playing Grand Theft Auto IV.[35] Walther, Morgenstern and Hanewinkel found a relationship between negative personality traits (aggression, low self-esteem, anxiety, ADHD and addiction) and problematic levels of gaming.[36]Similarly, Cole and Hooley, in a study of massive, multi-player, online gamers (MMO), found correlations between anxiety, neuroticism, social phobia and absorption in MMO gamers who exhibited problematic Internet use.[4]

Studies relating personality to gaming behaviors suggest there are innate characteristics of individuals that may influence the type of game they play, the amount of time played, and the behaviors they exhibit within games. While this general conclusion can be drawn, the vast array of gaming genres (e.g., fantasy, first person shooter, sandbox, etc.), and the various ways in which games can be played (e.g., console, MMO, single-player, handheld etc.) make more than broad-brush conclusions impossible at this point. Further research must be conducted to better understand how personality relates, positively and negatively, to gaming behaviors.

The Present Study

The purpose of the present study was twofold. First, we collected perceptions on the ethics of specific game-related activities and the degree to which participants had engaged in each activity to provide information on how gaming behaviors that have ethical components are evaluated by video gamers. Second, we correlated these responses with participants' personality scores to determine how personality relates to perceptions about ethical gaming activities.

Method

Participants

Undergraduate students (N = 77) enrolled in an Introductory Psychology class at a small, private University volunteered to participate. Twenty participants were female and 57 were male with an average age of 21.48 years and an average college grade point average of 3.01. Participants in the sample were asked how often they play online or computer games. Thirteen percent of the sample reported playing games daily with 18% playing several times a week, 13% playing 1-2 times a week, 18% playing a few times a month, 10% playing 1-2 times a month, 20% playing a few times a year and 8% never playing.

Procedure

Participants completed a basic demographic survey including items on frequency of video game playing. Participants then completed a subset of items from a standard personality measure (16PF)[1] and the Ethical Behavior and Gaming Survey; a 16-item survey created for the present study. Participants were surveyed individually or in small groups of 2-3 people.

Measures

Ethical Behavior and Gaming Survey. This 16-item survey was created for use in the study. The survey presented participants with 16 behaviors that occur in online and computer-based gaming that could be considered cheating or unethical. Participants used a 5-item Likert scale to rate their perception of the ethicality of each behavior with 1= very unethical to 5=very ethical. Examples of items in the survey were the use of hacks, the use of bypasses, and using a cheat file to progress in a game. For each item, participants were also asked to indicate (yes or no) whether they had engaged in that activity. Two composite scores were created from this survey for each participant. The first score was a mean ethical rating score, with a higher mean indicating a higher unethical judgment score for the 16 items. The second score was an unethical action score. The unethical action score was created by summing the number of times each participant indicated he/she had engaged in one of the 16 gaming behaviors.

16PF. The 16PF developed by Cattell, Cattell & Cattell is a widely used measure of 16 personality variables.[1] It has shown adequate reliability and validity for college-age samples. For the present study, a subset of personality variables from the 16PF was used. The subset included measures of abstract reasoning ability, emotional stability, rule consciousness, utilitarian focus, vigilance, preference for abstract versus grounded thinking, and level of apprehension versus self-assurance.

Results

Ethical Aspects of Gaming: Participant Perceptions and Action

Descriptive information for the 16-item ethical behavior and gaming survey and associated composite scores is contained in Table I. Overall, the actions regarded by the participants as most unethical were accessing a server without permission (*M*=1.59, *SD*=.88), disabling other players' server permissions (*M*=1.62, *SD*=.92), lying to players on one's team to gain status (*M*=1.90, *SD*=.97), and lying to other players in general to enhance status in the game (*M*=1.97, *SD*=1.02). Unethical actions most engaged in by players were use of cheat files to progress in a game (yes=41, no=25), use of hacks (yes=26, no=41), lying to other players to get their possessions (yes=16, no=50), and lying to other players to enhance status in the game (yes=14, no=52). Interestingly, 11 participants chose not to report their actions in this study. Overall, these findings seem to indicate that participants can judge the level of ethicality of actions within games, and do differentiate between actions in games. Furthermore, the self-reported engagement in these actions was fairly modest, ranging from only two participants using bypasses (3% of those reporting) to 41 participants (53% of those reporting) using cheat files to progress in games.

Table I: Descriptive information for the ethical behavior and gaming survey

Item	*N*	Mean Ethical Rating*	*SD*	Ethical Action: Participant self-report of engagement in action	
				Yes	No
I currently use hacks	70	2.17	1.04	6	61
I have used hacks in the past	70	2.27	.99	26	41
I currently use bypasses	70	2.34	.96	2	64
I have used bypasses in the past	71	2.46	.95	9	57
I have used a cheat file to find answers to progress in a game	73	2.75	1.15	41	25
I use macros to perform multiple actions with a single keystroke in a game	70	2.67	1.05	7	59
I use an automated program (a bot) to accomplish tasks for me in-game.	72	2.43	1.07	5	61
I have bought game keys	72	2.79	1.10	11	55
I have lied to other players in order obtain their possessions	73	2.00	1.13	16	50
I have lied to other players in order to enhance my status in a game	74	1.97	1.02	14	52
I have lied to other players on my team in order to gain status in the game	72	1.90	.97	10	56
I have accessed someone else's game server without permission	73	1.59	.88	7	59
I have disabled other players' server permissions	71	1.62	.92	5	61

I have banned players from my server for no reason	71	2.08	1.03	5	61
I have banned players from my server so they can't gain status in the game	72	2.06	1.09	4	62
I have lied to a server administrator about my gaming activities, so I can continue playing	71	2.00	1.07	4	62
Overall Mean Ethical Rating Score		2.21	.612		
Mean Number of Ethical Actions Reported by Participants				2.61	2.37 (std)

- Participants rated how ethical they perceived each action to be using a 5 point Likert scale with 1=very unethical to 5=very ethical, thus a lower score is associated with an action judged to be less ethical.

Personality and Ethics in Gaming

Pearson correlations were calculated to examine the relationship between the two composite ethical behavior scores and the 16PF variables used in the present study. Results of this analysis, presented in Table II, showed only one significant correlation, between mean ethical rating score and rule consciousness, indicating that more rule-conscious individuals had a lower mean ethical rating score (indicative of a perception that the behaviors on the scale were more unethical), r=-.27, p<.05.

Table II: Pearson Correlations between Mean Ethical Rating Score, Ethical Action Score and Personality Variables

Personality Variable	Mean Ethical Rating	Ethical Action Score
Abstract Reasoning	.07	.06
Emotional Stability	.18	.11
Rule Consciousness	-.27*	-.21
Utilitarian versus Personal Focus	-.10	-.05
Vigilance	.01	.09
Abstractedness versus Grounded Thinking	-.02	.04
Apprehension versus Self-Assuredness	.04	.13

Discussion

The purpose of this study was to examine unethical behavior in gaming and then to determine if personality correlated with perception of, and engagement in, unethical gaming behavior. The study is interesting in that it documents how individuals think ethically about a range of different game-related behaviors. Participants do seem able to distinguish between levels of ethicality of different types of activities that occur in gaming. More promising, however, at least to game developers, is that when asked to self-report which activities they engaged in, participants reported fairly low levels of engagement in unethical actions. It is possible that underreporting of actions occurred, or that the participants who chose not to report did so because they engaged in unethical actions at a higher rate than their peers. Further research will be required to determine which, if any, of these explanations is correct. Continued investigation into this area is important. Participation in gaming is pervasive across both men and women and continues to grow.[2,3] Like any domain of activity, the world of gaming has developed a culture that warrants better understanding.

Although the study of gaming ethics is a rich environment for further investigation, the results of the present study cannot support the same argument for the continued study of the correlation between personality and gaming ethics. Essentially, in the present study, no support was shown for the relationship between personality and game-related ethical behavior. It is possible that the relationship does exist, but that the subset of personality variables used in the present study was unable to illuminate the relationship. On the other hand, it could also be that personality of the player is less influential in determining gaming behavior than the context of the game itself. When a player is immersed in a challenging game, perhaps decision-making about whether or not to lie to another player or use a cheat is made quickly without regard to whether or not the action is in line with internal representations of player personality.

The study of how players' perceive ethical behaviors and the extent of their ethical actions in gaming is ripe for further study. As gaming becomes even more pervasive and is incorporated into more life activities, including using games to teach in traditional learning environments, this area of knowledge may become more important.

Author Disclosure Statement

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