What's "Awe" The Hype? Motivations to Share Video Game Information

Prerelease

Logan Bryan Blankenbeckler

Thesis submitted to the faculty of the Virginia Polytechnic Institute and State

University in partial fulfillment of the requirements for the degree of

Master of Arts

In

Communication

James D. Ivory, Chair

Adrienne Holz Ivory

Beth M. Waggenspack

May 8, 2017

Blacksburg, VA

Keywords: awe, content characteristics, motivation, sharing, video games

What's "Awe" The Hype? Motivations to Share Video Game Information Prerelease

Logan Bryan Blankenbeckler

Abstract

Over the past few decades, video games have become a popular avenue for dissemination of information and publicity about video games is word-of-mouth sharing. Thus, it is imperative for researchers to examine the social, and individual processes that guide this behavior. Focusing on prerelease sharing behavior specifically, this pair of studies aimed to identify predictors and dimensions of video game information sharing, and explore the impact content characteristics have on individuals' likelihood to share game information either online or to friends. A pretest survey ($n = 577$) investigated the prominence word-of-mouth communication has on video game information sharing amongst college students, finding it to be the most common method of sharing and obtaining game information. The main experiment ($n = 227$) examined participants' intent to share information after being exposed to a video game trailer manipulated to emphasize variations of core video game characteristics (control, narrative and mechanics) and emotional appeals (control, awe and hedonic). There were no findings suggesting the manipulations had a significant effect on participants' intent to share; however, those who reported first-person shooters as their favorite genre reported significantly more intent to share. Conceptualized through Social Exchange Theory and Social Identity Theory; the experiment also explored motivations to share based on exchange value, and gamer identity. Implications for our understanding of motivations to share game information based on social networks and content characteristics are discussed.

What's "Awe" The Hype? Motivations to Share Video Game Information Prerelease

Logan Bryan Blankenbeckler

General Audience Abstract

Questions about what makes video games highly anticipated and commonly discussed before games are played by the general public were examined through a pretest survey and main experiment. A pretest questionnaire focused on potential motivations driving word-of-mouth information sharing among video game players about particular games. The main experiment further examined motivations to share game information but also considered the impact of content characteristics (games intended for enjoyment vs. awe-inspiring experiences) and game characteristics (games story driven vs. gameplay driven) used in video game trailers on intent to share and heightened anticipation surrounding an upcoming game. Word-of-mouth information sharing and social structures were highly related to participants' intent to share information about games to friends, but specific content included in video game trailers did not significantly increase intent to share. This thesis contributes to word-of-mouth and marketing research in the context of prerelease video game promotional efforts by examining external and internal motivations which drive the sharing of information or content with friends.

Table of Contents

Introduction

Video games are a very popular form of entertainment, and a large body of research has attempted to describe and understand what makes them so widely enjoyed. Console or PC gaming systems are in the forefront of the discussion, and recent research has tried to understand the different experiences these unique media provide players (Elson, Breuer, Ivory, & Quandt, 2014). Much of this research focuses on understanding what exactly a specific game means to an individual after experiencing, or physically playing such game at some point in their life (Oliver, Bowman, Woolley, Rogers, Sherrick & Chung, 2015). Experiences gained from playing video games is a rich area of research; however, little research has considered the anticipation video game players experience leading up to playing a particular game. Individuals involved in video games, those who play, and those who share information about games actively, online or interpersonally, experience games far before they play it. Video game players get excited about upcoming games and often seek out and share information with each other to heighten anticipation. Sharing through word of mouth among video game players is especially ubiquitous and research has tried to understand the impact it has on the adoption and monetary success of games (Cox & Kaimann, 2015). Before a game is released to the public, there are months or even years of anticipation for those invested in the game what whatever reason. This time of anticipation results in rich information sharing of expectations and thoughts about the upcoming game, sometimes even resulting in a preemptive purchase of the game, or a preorder (Hernandez & Vicdan, 2013). Nevertheless, no research to date has examined the motivations information sharing in this context. The goal in the present study is to understand the motives and incentives behind sharing video game information.

Generally, it is understood that sharing of information is both frequent and considered important, but little is known about what makes certain content more likely to be shared (Berger

& Milkman, 2011). Video games are no different, frequently taking place both online and interpersonally and among a wide array of individuals with different backgrounds (Chess, Evans, & Baines, 2016). Whether the sharing is done interpersonally with friends or family, or whether it is carried out online and targeted towards a community, individuals have a plethora of avenues to share information about particular upcoming games. Conversely, there are a variety of promotional information tools or modes that video game developers, news outlets, and gamers can use to promote an upcoming game before anyone physically plays it (Hernandez & Vicdan, 2013). These modes include game trailers, news articles, public showings, forums, featured stories, magazines, and so on. Moreover, these have the potential to influence apparent hype that engrosses highly anticipated games before they are even played.

A prominent and recent example of this hype at play is seen in the 2016 release of game *No Man's Sky*. *No Man's Sky* was highly anticipated and video game players around the world were raving over the game with a sense of awe, claiming the unique design of the game would change video games forever (Suderman, 2016). The design was innovative and unprecedented in video games because it involved an algorithm that allowed for players to experience randomness in a computer simulated universe created by programmers. The idea of a game with total freedom in a boundless universe excited video game players before the game was released or played. However, this sounded great in theory, but not in practice. Two weeks after the game launched, *No Man's Sky* lost 90 percent of its player base (Jeffery, 2016). The reason it lost so many users is unknown for sure, but a common complaint was the nature of the game itself (Suderman, 2016). The game gives players full freedom to explore, but no purpose for the exploration. This apparent "flop" of a release is worth exploring in more detail. What made video game players so excited for this game? Why were the expectations so high and why were

they squandered so quickly? Perhaps public expectations were high because of the awe-invoking nature of the game it projected, or perhaps because a friend suggested it. These questions are explored in detail in the sections to follow.

A pretest survey and main experiment were used to shed light on the prominence of word of mouth among video game players, and to examine individual and social processes which drive information sharing in the prerelease stage of upcoming games. Furthermore, the main experiment aimed to investigate the impact various content characteristics and emotional appeals has on intent to share to determine what types of video game content are most shareable and why that is. Applying Social Exchange Theory and Social Identity Theory, this thesis also provides a theoretical lens to understanding various social factors that may encourage or discourage information sharing in this specific context. Understanding how and why people share information about video games can provide some insight into the gaming community and their social tendencies both in-person and online, as well as shed light on which type of video game content that is most likely to be shared, providing important implications to marketing and advertising research and practice.

Together the questionnaire and main experiment aimed to identify the most popular form of video game information sharing prerelease and the impact content characteristics have on individuals' likelihood to share game information either online or interpersonally. The pretest questionnaire investigated the prominence word of mouth communication (either online or interpersonally) has on video game information sharing among college students and examined the effect of social factors which successfully inform the subsequent experiment. Manipulating versions of a video game trailer for stimuli, the main experiment compared the effect of core video game characteristics (control, narrative and mechanics) and emotional appeals (control,

awe and hedonic) on participants' intent to share. Largely conceptualized by Social Exchange Theory and Social Identify Theory the main experiment presents a series of hypotheses and one research question aimed to investigate motivations to share based on the equity of any given exchange, and extent of identity placement in gaming community. In addition, the main experiment predicted that the implementation of specific content characteristics and emotional appeals in a video game trailer would positively impact participants' intent to share information. This thesis provides insight to why gamers frequently share information with each other and the impact social relationships, community involvement and specific content has on the ongoing process.

Literature Review

As mentioned, video game players will often seek out and share information with each other to heighten anticipation about upcoming games. Indeed, people who play video games on a regular basis, or "gamers," frequently communicate with each other and meet in the virtual or even real world (Nauroth, Gollwitzer, Bender, & Rothmund, 2015). The method in which gamers may collect and communicate game information varies greatly due to the vast amounts of potential information sources available to the public who are interested in video games. Gamers may gain information through friends and family, forums, news articles, promotional trailers, gaming events, public demonstrations, social media, various game advertisements, video game websites, etc. Indeed, some of these information sources are actively sought out by gamers and others are simply seen in the process of searching or interacting with others. If particular content is interesting to a gamer, for whatever reason, there is a choice of whether or not to share it and on what platform. For example, one may read an online news article about an upcoming video game and share that information with a friend. Likewise, one may come across an interesting promotional trailer for an upcoming video game and share thoughts about it on a video game

forum. Although these examples are certainly plausible, the sharing of information does not happen in a vacuum and it is rarely a one-way interaction. Rather, because each video game has its own fans, game-specific sub-communities emerge where they can share gaming habits and common social practices, all while developing their own (sub) culture (Nauroth et al., 2015). This demonstrates the influence gamers have on each other when they share relevant information with each other. However, what motivates gamers to share this relevant information with each other in the first place, and what motivates them to share consistently? What type of content is most likely to be shared and why? These questions are essential to understanding the role and potential impact word of mouth sharing has on the video game community.

What motivates people to share information with others? People may share information for a variety of reasons, including self-enhancement purposes (Olsen & Wein, 2014; Alexandrov, Babakus, & Lilly, 2012), altruistic reasons (Berger & Milkman, 2011), or extrinsic reasons (Lin, 2007). One could be motivated to share because the action is seen to have intrinsic social exchange value (Homans, 1958) or because the action will generate reciprocity (Gouldner, 1960). In addition, these exchanges may be affected and mediated by social identity and existing power structures, sometimes resulting in inequitable exchanges (Macy & Simpson, 2004). More recent research has begun to link theories of derived emotions from content and theories of exchange, allowing for a more comprehensive understanding of why people may share information (Lawler & Thye, 1999). Video game players frequently communicate with each other, yet little research has explored why these interactions occur and why they persist. This research attempts to understand this sharing process through Social Exchange Theory, Social Identity Theory and content characteristics. Although the application of Social Exchange Theory in this context is exploratory, it is understood that practically useful content has social exchange

value (Homans, 1958; Blau, 1964; Cook & Rice, 2003; Berger & Milkman, 2011), and gamers assumingly view relevant content as practical. Furthermore, the apparent high-frequency information sharing gamers are involved in, both online and interpersonally, may be done to generate reciprocity, a tenet of Social Exchange Theory (Berger & Milkman, 2011). Social Identity Theory has often been applied to understand gamers perceived position within the gaming community in a variety of ways (Grove, Courtois, & Looy, 2014; O'Connor, Longman, White, & Obst, 2015; Nauroth et al., 2015). Indeed, it is apparent gamers constitute a visible social category and people differ in the extent to which they perceive themselves to belong to this category (Nauroth et al., 2015). Thus, gamers will be more or less likely to share depending on a gamer's perceived placement within the social category. Perceiving oneself as a member of a group creates the basis for group identification processes, which influence the way individuals interpret group-relevant information to share (Nauroth et al., 2015). Lastly, the present research examines the impact content characteristics have on the process of sharing. More specifically, how content generated to evoke high-arousal positive emotions (i.e., awe-inspiring content) impacts the likelihood of social transmission (Berger & Milkman, 2011). Social Exchange Theory and Social Identity Theory are implemented in this context to help explain why gamers frequently share information with each other; and analyzing content characteristics of video game information can give us insight into what makes content more shareable, and potential explanations to this inquiry.

The following section will outline Social Exchange Theory, perceived power and reciprocity have on ongoing exchanges. Following this, I will explain Social Identity Theory as it relates to the video game community and how different derived emotions, based on distinguishable game content characteristics highlighted in a video game trailer, can affect the

intent to share information. The sections to follow aim to provide relevant research that serves as the basis to understanding why individuals frequently share video game information with each other, and how specifically generated content impacts the process.

Social Exchange Theory

Social Exchange Theory is a social psychological perspective that explains social relationships as a process of negotiated exchanges between parties based on the concept of rewards and punishments (Homans, 1958). Although Social Exchange Theory has often been applied to macro-level exchanges, for the purposes of this paper, I will focus solely on the micro-level (i.e., individuals). With this in mind, social exchange also posits that these types of exchanges are based on subjective cost-benefit analyses (Cook & Rice, 2003). Simply put, in any given interaction, individuals will make decisions based on their perceived benefit and cost of such action. More accurately, according to Molm, Quist, & Wiseley (1993) social exchange takes place only when social interactions meet one the three conditions: first, actors are dependent on one another for outcomes they value; second, actors behave in ways that increase outcomes they positively value and decrease outcomes they negatively value; and lastly, actors engage in recurring exchanges with specific partners over time (Molm et al., 1993). This explanation is especially useful when it comes to prerelease video game information sharing between gamers. Because specific video games have their own fans and game-specific sub-communities (Nauroth et al., 2015), the prerelease stages of a game provide an opportunity for these sub-communities to form. When video game players share information about games prerelease, they are collectively considering the quality and merit of such game in question, all in an effort to decide whether a particular game looks enjoyable or interesting enough to purchase. Gamers ultimately want to buy what they consider to be good video games, but during the

prerelease stages of games, the worth of games are up to the video game community to decide based on the interactions they have and content they share.

Social exchange has often been used most commonly to understand organizational and workplace behavior (Cropanzano & Mitchell, 2005). However, it has also been used to understand why members of online communities consistently share information with each other despite there being a monetary benefit (Jin, Kim, & Park, 2010), and to understand why and how relationships evolve and persist based on certain "rules" of exchange (Cropanzano & Mitchell, 2005). For example, Chen, Wang, Yan & Zhang (2016) used Social Exchange Theory to understand various determinants of knowledge sharing in online health communities. They found that information which seemed to benefit community members' self-worth, reputation or social support was most likely to be shared to other members of the community. These results support the notion that Social Exchange Theory can be used to understand information sharing in specific online contexts as well. However, the video game community is less formal when it comes to membership and is not limited to online interactions - as other online communities are. Due to the growing community of individuals who consider themselves "gamers" (Nauroth et al., 2015), the video game community now acts more as an aggregate of distinct, but related, communities specific to individuals' interests. Indeed, video game (sub) communities often emerge online and persist for extended periods of time, and gamers may even form relationships with those who share similar gaming interests (Nauroth et al., 2015). Although information sharing within the video game community can take place both online and interpersonally, social exchange is most apt in understanding interpersonal relationships.

As noted, social exchange has seldom been applied to online communicative interactions, but when trying to understand ongoing interpersonal interactions social exchange is ubiquitous.

Indeed, word of mouth is a currency of exchange that allows people to gain personal and social benefits, often leading to the strengthening social ties (Alexandrov et al., 2012). For example, an individual may tell a friend about a new video game to prove that he or she is more knowledgeable and involved in the gaming community, thus reinforcing self-image within that relationship. In this example, the individual is motivated by an urge to reinforce his or her self-image and maintain perceived status within the given relationship. Because gamers constitute a visible social category and people differ in the extent to which they perceive themselves to belong to this category (Bender et al., 2015), it is reasonable to claim inequity may be a product of information sharing based on perceived placement.

Power

An important and difficult aspect of Social Exchange Theory includes power differences associated with social structures. Individuals may perceive themselves in a specific social structure which impacts the equity of exchanges. Indeed, research on social exchange has consistently found that relative position in a network of exchange relations produces differences in the relative use of power – thus manifesting an unequal distribution of rewards across positions in a social network (Cook & Rice, 2003). Social exchange theorists Blau (1964) and Emerson (1962) were the first to really explore the link between social structures and the use of power in the context of micro-level exchanges. The social structures that are constituted enable some actors to exercise power and influence, and conversely, constrain actors as well. Social Exchange Theory maintains heavy emphasis on dependence – the extent to which one's outcomes is contingent on exchange with another (Thibaut & Kelley, 1959). The absolute and relative dependence of actors on one another in a relationship determines their structural power over one another: the more alternatives available, the less control actors have over each other

(Molm et al., 1993). Furthermore, the greater their difference in relative power, the more likely their exchange will be unequal. In this case, power acts as a pivotal aspect of Social Exchange Theory and everyday interactions. In an imbalanced exchange, the actor who is less dependent is considered "power advantaged" and will receive relatively more of the outcomes that he or she desires from the exchange than will the disadvantaged actor (Molm et al., 1993). Social Exchange theorists have posited that power is always present in exchanges, even when the exchange is balanced (Cook, Emerson, Gillmore, & Yamagishi, 1983). This can appropriately be applied to gaming communities. Although gamers are not a typical social group, many of these structures still undoubtedly exist (Grove et al., 2014; O'Connor et al., 2015), and it is useful to examine how these structures influence the ongoing exchanges of information among video game players.

Reciprocity

In line and often associated with social exchange and power structures, the rule of reciprocity is a vital feature of social exchange. Reciprocity, the giving of benefits to another in return for benefits received, also contributes to information exchange, sometimes resulting in a mutually beneficial outcome (Hirschman & Wallendorf, 1982). Other times, when an actor considers a received benefit unequal, feelings of injustice arise making it difficult to reach mutually beneficial exchanges. Reciprocity, according to Molm et al. (1993), consists of three varying elements. First, one actor's behavior is contingent upon on another's; second, acts are repaid by functionally equivalent acts; and lastly, the values and outcomes received by each actor are approximately equal (Molm et al., 1993). These elements are based on the assumption that there is a general baseline of reciprocity that theoretically exists. Perfect reciprocal exchanges seldom occur, if an actor feels as if they received inferior benefits; the unequal exchange may

lead to feelings of unease, provoking behavioral reactions to properly reciprocate. For example, an individual who rarely shares video game information would be more likely to share if his or her friends did. Conversely, an individual who shares video game information often will rarely feel obligated to share based on the reciprocal aspect alone; rather, those individuals would share for self-enhancement purposes based on perceived power.

In sum, those who perceivably hold more social power and knowledge in an exchange may be motivated to share information for self-enhancement purposes to reinforce perceived social placement. Conversely, those within the community who perceivably hold less social power and information may be motivated to share information to reciprocate inequitable exchanges in the past.

H1a: Those who reportedly share more (hours per week) video game information than they receive from their friends will be motivated to share for self-enhancement.

H1b: Self-enhancing motivations will be positively correlated with attitudes towards sharing.

H1c: Self-enhancing motivations will be positively correlated with intent to share.

H2a: Those who reportedly share less video game information (hours per week) than their friends will be motivated to share for reciprocity.

H2b: Reciprocal motivations will be positively correlated with attitudes towards sharing.

H2c: Reciprocal motivations will be positively correlated with intent to share.

Social Exchange Theory increasingly has involved explicit consideration to social structure, as both product and constraint, typically in the form of social relations (Cook & Whitmeyer, 1992). However, in order to truly understand how individuals perceive themselves within different social structures, Social Identity Theory must be considered.

Social Identity Theory

Although power described in social exchange is closely related to social identity, there is a key difference to note. Social Identity Theory, formulated by Tajfel (1979), posits that groups that to which people belong to act as an important source of pride and self-esteem. More in depth, the central premise of Social Identity Theory is that individuals categorize themselves in terms of social groups to which they belong, and they are motivated to make subjective positive evaluations of their in-groups relative to out-groups so as to maintain a positive sense of self (Chan, 2014). So, social identity is described as an individual's self-concept derived from his/her knowledge of his/her membership in a social group (Macy & Simpson, 2004). This is distinctively different than social exchange in that the perceived power is a cognitive construct that occurs individually with other or out-groups in mind.

Social Identity Theory, unlike social exchange, has been applied to the video game community in a variety of ways (Grove et al., 2014; O'Connor, Longman, White, & Obst, 2015; Nauroth et al., 2015). One in particular examined gamer identities and willingness to ascribe to such group, finding that gamer identity is associated with stereotypical behaviors that find their origin in consumption logic (Grove et al., 2014). Gamer identity can be thought of as an individual who self-categorizes himself or herself as a "gamer" or member of the gaming community. Grove et al. found frequency of gameplay and friendship networks as the largest predictors of self-categorizing to the gaming community. For example, individuals who play video games frequently may deny being a part of the video game community based on out-group perceptions of the in-group. According to Grove et al. (2014), however, positive friendship networks may fill this void by providing gamers with an environment in which gamer identity can be fulfilled (i.e., people are more likely to ascribe to the group if they have a lot of friends

who play and talk about video games) (Grove et al., 2014). A huge aspect of these friendship networks are the conversations which take place within them allowing for gamer identity to form. These two predictors provide important implications for information sharing and those who self-categorize as gamers will be more likely to value the community higher and thus contribute more to improve their personal involvement. Put simply, individuals who play video games frequently, and have friends who are considered members of the gaming community, will be more likely to self-categorize as gamers. Further, individuals who self-categorize as gamers will value the community as high and thus will be motivated to share video game information to improve their personal involvement by helping others within the valued group.

H3a: Those with higher frequency of gameplay and video game friendship networks will be motivated to share for community enhancement.

H3b: Frequency of gameplay and extent of video game friendship networks will be positively correlated with attitudes towards sharing.

H3c: Frequency of gameplay and extent of video game friendship networks will be positively correlated with intent to share.

Video games allow for interactions to take place, both online and interpersonally, and as outlined, much of times these interactions can be understood through Social Exchange Theory or Social Identity Theory. These two theories are imperative in explaining who is most likely to socially transmit information in the gaming community, through what medium and why. As stated earlier, very little research has been conducted on the social transmission of video game information, and even a smaller amount has examined the influence word of mouth communication has on video game adoption and sales. This is despite recent research demonstrating the causal impact of word-of-mouth on product adoption and sales, and decades of

research suggesting that word-of-mouth communication affects attitudes and decision-making (Berger & Milkman, 2011; Olsen & Wein, 2014).

Social identity and exchange provide a good starting point to understanding these questions; however, both solely focus on rational and cognitive processes, generally overlooking emotional processes involved (Lawler & Thye, 1999). Because video game information is aimed to promote unique experiences to users and these experiences are contingent upon the specific game characteristics, word of mouth transmission may occur on the basis of emotional responses provoked by video game prerelease chatter. In the last section of this literature review, I will outline research on how the influence word of mouth has on video game social transmission. Then I will outline experiences that are often associated with video games, specifically focusing on the emotional response of "awe". It is important to note, however, that for the purpose of these studies I will only consider anticipated emotional responses. By relating game characteristics to emotional responses, I will provide justification as to how these anticipated emotional responses may shape and even predict social sharing of game information via word of mouth prior to game release.

Video Game Information Sharing

There is a shortage of academic research that examine word of mouth communication between video gamers and the salience of these interactions on sales and extent of information transmission. Further, there is a lack of research that has focused on specific characteristics that make video games them more or less likely to be shared. One study in particular attempted to investigate this question. Cox & Kaimann (2015) examined the extent in which professional critics and consumer word of mouth affected video game sales. They found conflicting results based on past research (Chintagunta, Gopinath, & Venkataraman, 2010), finding no evidence for

significant explanatory power of word of mouth affecting sales performance of video games. This study, however, has its methodological limitations and conceptual shortcomings. First, they combined the measures of critic reviews and consumer word of mouth, rather than determing which one has more of an impact in comparison. Second, they applied movie critic reviews to video games inappropriately. They needed to explain the major differences between movie critic reviews and video game critic reviews in order to appropriately justify their conclusion. Movie reviews are different in that they analyze noninteractive media that has a finite timeframe in which to be consumed. Video game critics analyze interactive media and consider different experiences one may have while playing a particular game for an unknown amount of time. Other studies have assumed and confirmed the significance of word of mouth between gamers and the transmission of game information. One such study examined the difference between current and potential video game players in a variety of different contexts (Teng, Wang & Lo, 2007). Notably, the results suggest both current and potential gamers use word of mouth as information sources moreso than other forms of information sources, i.e., critic reviews, demos, advertisements and endorser attractiveness.

H4: Individuals will have higher intent to share with friends than with video game community members online.

This study attempts to emphasize the sheer dominance word of mouth has on the obtaining and sharing of video game information. Until now social interations are the only factors which motivate video game players to share game information, but can specific content and emotional appeals also motivate a gamer to share?

Video Game Experiences

Much video game research to date has primarily focused on different types of experiences this unique medium can provide to users. Research on experiences with entertainment media, and specifically video games, has long included a heavy focus on experiences related to enjoyment (Nabi & Krcmar, 2004; Oliver & Bartsch, 2010; Oliver & Raney, 2011). Research to date has generally dismissed the video game medium as being associated with hedonic experiences, suggesting those who play games primarily do so for enjoyment (Elson et al., 2014). Not until recently has research begun focusing on an alternative form of media enjoyment that is centered around a deeper feeling of meaningfulness and appreciation rather than hedonic enjoyment (e.g., Oliver, 1993; Oliver & Bartsch, 2010; Oliver, Bowman, Woolley, Rogers, Sherrick, & Chung, In press; Oliver & Hartmann, 2010; Oliver & Raney, 2011). Research on this topic of experiences is vast; however, it has seemed to lose popularity as of recent. The reasons for this may be attributed to a lack of understanding and insight into the underlying psychological processes that give rise to these different types of entertainment experiences (Bartsch & Hartmann, 2015). This research has provided scholars with an important implication that video games provide different experiences, and these experiences affect people's emotions in different ways. For the purposes of the present research, only experiences of hedonic enjoyment and awe are considered.

Video Game Arousal

Video game effect research has often relied on physiological measures to examine short-term effects of video game play. Much of this research aims to find a relationship between violent video games and aggression (Anderson & Bushman, 2001; Bartholow, Engelhardt & Saults, 2011) and hostility (Arriaga, Carneiro, Esteves & Monteiro, 2006). However, recent

research has taken a more nuanced approach to physiological arousal, taking a promising step back from the video game violence and aggression debate. These interesting approaches use arousal to explain the emotional affects obtained through technological advancement (Ivory & Kalyanaraman, 2007), playtime and game preferences (Hoogen, Ijsselsteijn, Kort & Poels, 2012), and portable devices (Ivory & Magee, 2009).

Hoogen et al. (2012) conducted an experiment that examined the effect arousal has on motivations to play longer and the preferfence of specific games. They found that arousal significantly predicted long-term game preferences but contributed little to short-term gaming preferences (i.e., how much a user wanted to keep and/or buy the game played). In addition to this, and in line with past research, the opposite was found for pleasure - based emotions. These findings are interesting for a couple reasons. One, the arousal measure actually predicted game preferences and helped explain purchasing intent. Two, hedonic motivations were not a predictor of game preferences; however, the general assumption of hednoic motivations remain significant focal point in video game experience research.

Physiological arousal has indeed been a key measure in video game effect research. However, no one to-date has applied physiological arousal to social transmission and word of mouth information sharing. This begs the question: does heightened arousal promote transmission of video game information via word of mouth? If so, which type of game characteristic is most likely to provide arousal, and which specific emotion is most likely to promote social transmission?

Star Citizen

This thesis attempts to examine what makes games like *No Man's Sky* so highly anticipated and talked within the gaming community. To do this, the video game *Star Citizen*

was chosen as the stimuli due to its highly anticipated but unconfirmed release date and the similarities it shares with *No Man's Sky* (Hello Games, 2016). This PC space exploration game has been delayed numerous times, yet it maintains a large crowd funding following and has produced more than one hundred million dollars with the hope of it being released this year ("Roberts Space Industries," 2016). The game continues to be delayed and the public following continues to wait for information about how their money is being put to use and when, or if, the game will be released. In addition to *Star Citizen* being a popular unreleased game producing rich conversation, it also has potential to evoke feelings of "awe," with the game's large scope, unique game mechanics and narrative. Awe-inspiring content often has to do with science and unthinkable or groundbreaking content (Berger & Milkman, 2011), and *Star Citizen* provides just that to its public by allowing users to explore endless space and use game content that is yet to be commonplace in the game industry. Moreover, considering the present research is concerned with individuals' motivation to share prior to the release of a game, *Star Citizen* is also appropriate for this context due to its unconfirmed release date.

    Star Citizen promotes and disseminates information in various ways. Likewise, popular media promotes and disseminates information about the game due to its popularity and extreme crowd funding success. This thesis edits various versions of a popular *Star Citizen* cinematic trailer that has garnered nearly 2 million views on YouTube (Star Citizen, 2014). By manipulating text within the video game trailer, this thesis hopes to isolate and emphasize specific content within the game trailer to determine which has the largest impact on participants' intent to share.

Motivations to Share

It is understood that video games serve as a valuable tool of transmitting certain values, but what motivates people to transmit values or thoughts of particular video games through word-of-mouth (Martinez, Martinez, Samaniego & 2015)? Berger & Milkman (2011) examined how online content characteristics affect virality and how emotions shape social transmission. Virality to Berger & Milkman (2011) is simply the extent in which certain content goes viral, or is rapidly shared. This article discusses three studies that investigate specific emotional elements of content that are most likely to become viral, or most shared. Through a content analysis of 7000 *New York Times* articles, their first study examined what type of online content that most shareable and why. To determine why specific type of content was more likely to be shared, they coded for emotionality and valence evoked by popular news articles and determined the likelihood of it being shared (making the most-emailed list) was largely influenced by emotional appeals used within the article titles. Results from their first study support the fact that arousal can shape social transmission. Specifically, positive and negative emotions characterized by activation or arousal (i.e., awe, anxiety, and anger) are positively linked to virality, while emotions characterized by deactivation (i.e., sadness) are negatively linked to virality (Berger & Milkman, 2011). Their second and third studies isolated these emotions and tested them in a laboratory setting. The findings from these further underscore the role of arousal in social transmission. Consistent with their first study, they found when content evoked low-arousal emotions, it was less likely to be shared; however, content that evoked high-arousal emotions were more likely to be shared. The high arousal emotion this study will focus on is awe, as it seems particularly conducive to *Star Citizen's* purpose and aim as a prestigious video game project.

Awe

As mentioned, Berger & Milkman (2011) introduce the belief that a high-arousal emotion of "awe" that if evoked is likely to lead to social sharing. Awe has been considered and analyzed for centuries in a wide variety of disciplines such as religion, philosophy, art, sociology and psychology (Keltner & Haidt, 2003). For purposes of this paper, awe is considered a feeling of elevation in the face of something greater than oneself. A feeling of awe is generated by stimuli that open the mind to unconsidered possibilities and the arousal it induces may promote transmission (Berger & Milkman, 2011). In light of this, video games and *Star Citizen* in particular seem like a perfect stimuli to evoke emotions of awe, and new emerging video games such as *Star Citizen* may have the capacity to provide such arousal. If a game, or characteristics of a game, can evoke this emotion of awe, according to Rime et al. (1991) private emotional experiences are generally followed by the social sharing of emotion, or evocation of the experience in a shared language. In this sense, if the feeling of awe is successfully evoked, it may lead to the social sharing of such emotion.

This emotion of awe falls in line with previous video game effect research on eudaimonic, or meaningful experiences. However, awe has not yet been applied to video games. Experiences are often difficult to measure and operationalize, especially in the case of meaningfulness. Examining specific emotions, and awe in general, is a different way of approaching video game effects. Awe and its implication on word-of-mouth social transmission should shed light on which types of video games that are most likely to be shared prerelease and provide insight into why that is.

Although Berger & Milkman's (2011) conception of awe is not concerned with video games or interactive media in general, it still provides insight into how specific content can

evoke specific emotions, and these emotions have predictive power in the likelihood of sharing and social transmission. The video game medium seems especially appropriate to apply in this context because video games have characteristics that are unique and specific to any given game. Characteristics vary from game to game, and most of this can be attributed to each game having its own design, characters, gameplay, soundtrack and in and out game features, it is important to identify and examine common game characteristics in detail to understand how some characteristics may be more or less likely to promote the sharing of game information prior to release. Given the results of Berger & Milkman (2011), and Cox & Kaimann's (2015) studies, and the apparent flop of awe inspiring game *No Man's Sky,* it is predicted content that is generated to provide people with a sense of "awe" will be more likely shared.

H5: Online video game trailers incorporating elements of awe will have higher intent to share than game trailers incorporating elements of hedonic

Core Characteristics of Video games

Elson et al. (2014) propose a research framework describing factors involved in the video game experience with their Integrated Model of Player Experience (IMP). The IMP posits three key elements that define video game experiences: context, player and game. The game characteristic defined by the IMP includes all contents and mechanisms of the game being played (Elson et al., 2014); including narrative, mechanics, and social context as integral aspects of a gamer's experience. The narrative comprises all aspects of the game's story and setting, such as plot, characters and their attributes, events, and dialogues (Bizzocchi & Tanenbaum, 2012). Mechanics refers to all the game "rules" and define the options for interaction in and with a game (Elson et al., 2014). Social context includes the device a game is played on, the controls being used, the location or setting in which a game is played, and also the possible presence of

other players and the interaction they have with them (Elson et al., 2014). Within each one of these core game characteristics lie subsets of characteristics that could help promote the social transmission of video games.

In addition to the narrative content that defines media enjoyment experiences with other screen media such as television and film, mechanics are essential to the nature of a gaming experience (Elson et al., 2014). One particularly important characteristics of the mechanics of a game that closely relates to the video game experience is intuitiveness, or game difficulty. Because player actions are mediated through a control interface, these two characteristics are similarly linked (Przybylski, Rigby, & Ryan, 2010). If players do not have a fully intuitive sense of orientation and action in virtual environments, they must invest time and energy to master the control interface of each game. Further, games that have complex controls and mechanics are said to have a "steep" learning curve and consequently have a negative effect on the user's experience (Przybylski et al., 2010). Examples of elements that define difficulty are intellectual challenges, number and skill of opponents, or demands on reaction time and hand-eye coordination (Elson et al., 2014). Previous studies (Oliver et al., in press; Tamborini, Grizzard, Bowman, Reinecke, Lewis, & Eden, 2011) have already shown that different game mechanics address different needs and that the fulfillment of these needs is related to the experience of both enjoyment and meaningfulness (Elson et al., 2014).

By distinguishing between these characteristics we can identify which one has the largest impact, and on which type of involved or non-involved gamer, on the intention to share information about the game in question. Video game players interested in potentially purchasing an upcoming game do not have the luxury of experiencing the game characteristics first-hand. Thus, video game players are forced to rely on word-of-mouth and many times online content.

With this in mind, this thesis gives special attention to the variety of tools and methods game advertisers can use to promote a game in its prerelease stages. Little research has been conducted on the effect of content characteristics of video games have on individuals' intent to share information, three hypotheses and one research questions intuitively emerge from the literature.

Due to the notion that many types of media include narratives (Elson et al., 2014), this particular content characteristic is less reliant on the video game medium itself and appeals to a wider audience. Video games are very popular, but of course not everyone plays or is interested in it. Narratives featured in online generated content about video games can act as a common ground for those who generally aren't familiar with games. Thus, it is predicted that game trailers incorporating elements of narrative will be more likely shared than trailers incorporating elements of mechanics.

H6: Online video game trailers incorporating elements of narrative will have higher intent to share than game trailers incorporating elements of mechanics.

As mentioned, narratives are essential but not particularly unique to the video game medium. Because of this, it is predicted video game trailers emphasizing mechanics accompanied by the emotional appeal of awe will have higher intent to share. This is adopted from the recent example of *No Man's Sky,* which was popular prerelease because of the anticipated awe-inspiring game mechanics, not narrative. Although loosely conceptualized in theory, the case of *No Man's* Sky supports the assumption that people are largely interested in the mechanical nuances that video games allow for users. Indeed, an upcoming video game that claims to provide users with an awe-inspiring breakthrough in mechanics will be more transformative than an awe-inspiring narrative. Additionally, video games incorporating

common elements of narrative and enjoyment, which average video gamer players are accustomed to, will have higher intent to share than trailers incorporating elements of mechanics and hedonic.

H7: Online video game trailers incorporating mechanics and awe will have higher intent to share than trailers incorporating narrative and awe.

H8: Online video game trailers incorporating elements of narrative and hedonic will have higher intent to share than game trailers incorporating mechanics and hedonic.

Video game players typically have specific game genres they prefer over others. Some research has tried linking genre preferences to individual behavioral traits (Elliot, Golub, Ream, & Dunlap, 2012), introducing the prospect of individual genre preference being a predictor of individual social sharing tendencies.

RQ: Does genre preference have an effect on sharing intention?

Pretest Questionnaire

Method

Design. Prior to the main experiment a pretest questionnaire was carried out to investigate participants' motivations to share video game information to friends or online, and determine the most common form of video game information sharing. First participants were asked to rate the extent to which they agreed or disagreed with various behavior related to sharing game information to investigate motivational factors. Following this, participants were asked to rank their most trusted and most used video game information sources to examine the prevalence of word-of-mouth compared to other common forms of sharing methods. Results inform main experiment and future research.

Participants. Initially, 585 undergraduate students were recruited from communication courses at Virginia Tech in exchange for course credit using a departmental research

participation system. Six participants were eliminated from the analyses due to incomplete

questionnaires. Two other participants were eliminated due to submitting their questionnaires

with no response, leaving a final sample of 577 participants for analyses. The 577 participants'

mean video game hours played per week was 3.89 (SD = 8.05) (Range = 0-112) and their gender

makeup was 50.78% (n = 293) male. All study procedures were approved in advance by the

Virginia Tech Institutional Review Board.

Descriptive and Individual Measures.

Video game identity. The pretest questionnaire that was administered to participants

began with a single-item measure evaluating sex, and a three-item measure evaluating gamer

identity.   The three-item measure was derived from Grove et al. (2015), who found that

frequency of video game play and friendship networks are both major indicators of video game

players who self-categorize as gamers. Participants were asked how often they play video games

per week to measure frequency of gameplay. To measure friendship networks, participants

answered 5-point Likert-type questions ranging from Strongly Disagree to Strongly Agree,

asking the degree to which participants consider themselves and friends avid video game players.

Video game information sharing tendencies. To collect descriptive data assessing the

extent and manner in which participants share and receive video game information to and from

friends, participants completed the remaining 18 items of the survey which was developed and

conceptualized by tenets of Social Exchange Theory, Consumer Behavior and Social Identity

Theory to examine which may have the largest impact on video game information sharing

tendencies (see Appendix A).

Reciprocity. A measure of potential motivations to share and seek out video game

information, 11 items were developed to assess video game players sharing habits based on the

notion that relationships evolve and persist based on certain "rules" of exchange (Cropanzano & Mitchell, 2005; Jin et al. 2010). Participants answered 5-point Likert-type questions ranging from Strongly Disagree to Strongly Agree, asking the degree to which participants would reciprocate relevant video game information as a consequence of similar behavior from friends, and vice versa. These behaviors include sharing information, suggesting games, persuading to purchase particular games, persuading to play particular games, and sharing for social benefits (i.e., to have someone to talk to; play with, etc.).

Prerelease consumer behavior. A measure of consumer behavior was developed to assess preorder and prerelease video game information sharing tendencies. Participants answered 5-point Likert-type questions, ranging from Strongly Disagree to Strongly Agree, asking the participants the degree to which preordering and prerelease chatter occurs amongst themselves and their friends. This three-item measure was created to assess the view that highly involved players quickly act and preorder video games which is largely influenced by word of mouth and desire for maintaining status (Hernandez & Vicdan, 2014).

Gaming community perception. Another measure of gamer identity was developed to assess attitudes toward the gaming community. Participants answered 5-point Likert-type questions, ranging from Strongly Disagree to Strongly Agree, asking the degree to which participants agree that the term "gamers" is often looked down upon, and whether gamers have a strong sense of community. This two-item measure was developed from the concept that those who identify as a gamers think highly of the group (Grove et al., 2015).

Video game information sources. Two items were developed to assess the likelihood of using and obtaining video game information from a variety of channels. The first is used to explore the debated assumption that word of mouth and critic reviews are the most trusted and

frequently used methods of obtaining video game information (Cox & Kaimann, 2015;

Hernandez & Vicdan, 2014). The second-item is used to assess the likelihood of sharing video

game information through specific sources is measured using a five-item index comprising of

word of mouth, forums, blogs, video reviews and social media.

Results

    Data preparation. Each individual open-response, "how many hours of video games do

you play per week," was reviewed by the researcher to ensure consistent values for further

analysis. Specifically, the response "none" was changed to 0; means were calculated manually

for responses provided as estimations (i.e., 2-4 hours; 3-5 hours, etc.); and for responses

including greater-than values, the exact number entered was recorded (e.g., > 4, coded as 4).

    Sharing motivations. The findings (see Table 1) suggest that measures of reciprocity,

video game identity, social identity, and consumer behavior are closely related to individuals'

video game information sharing amongst friends. As can be seen in Table 1, nearly all

relationships pertaining to video game information sharing related reciprocity, video game

identity, social identity and consumer behavior yielded statistical significance of $p < .0001$; with

the exception of a social identity item which had no relationship reaching statistical significance.

Moreover, two relationships failed to reach a statistical significance of $p < .0001$; social identity

and reciprocity, those who think "gamers" have a strong sense of community will be more likely

to share because friends often do so, $r(573) = .23$, $p = .0015$; and those who consider the gaming

community as often looked down upon are likely to consider the gaming community to have a

strong sense of community $r(573) = .11$, $p = .0090$. The following section separates the

measures and outlines notable relationships which inform the subsequent study.

    Reciprocity. Relationships emerging from items of reciprocity and sharing tendencies:

those who often share video game information are likely to suggest particular video games to

their friends, $r(573) = .81$, $p < .0001$; those who suggest video games to friends are likely to

persuade their friends into purchasing particular video games, $r(573) = .79$, $p < .0001$; those with

friends who share information often are likely to suggest particular video games to friends,

$r(573) = .78$, $p < .0001$. Reciprocity items found those who often suggest particular video games

to their friends are likely to have friends who do the same, $r(573) = .72$, $p < .0001$.

Video game identity. Relationships emerging from items of video game identity and

sharing tendencies: those who reported themselves avid video game players are likely to share

video game information often, $r(573) = .73$, $p < .0001$; those who self-categorize as a video

game player were more likely to play more hours per week, $r(573) = .71$, $p < .0001$. Video game

identity items found those who reported themselves as avid video game players are likely to

consider their friends as avid video game players, $r(573) = .52$, $p < .0001$.

Prerelease consumer behavior. Relationships emerging from items of prerelease

consumer behavior and sharing tendencies: those who share video games often are likely to share

information about games prerelease, $r(573) = .71$, $p < .0001$; those who often share video game

information are likely to share information about particular games before they are released

$r(573) = .71$, $p < .0001$. Prerelease consumer behavior items found those who share information

about games prerelease are likely to persuade friends into playing particular games; and those

who often preorder video games are likely to share information about games prerelease $r(573) =$

$.61$, $p < .0001$.

Social identity. One social identity item which measured the extent in which participants

considered the gaming community as stigmatized did not statistically relate to items of sharing

tendencies. However, other relationships emerged from items of social identity and reciprocity

include: those who consider the term "gamers" as often looked down upon are likely to consider

the gaming community to have a strong sense of community $r(573) = .11$, $p = .0090$; and those who consider gamers to have a strong sense of community are likely to share information because their friends often do, $r(573) = .23$, $p = .0015$.

Information sources.

Obtaining information. The most likely source for participants' when obtaining trustworthy video game information (see Table 2) was word-of-mouth, 49.91% ($n = 288$) responded likely and 19.24% ($n = 111$) as very likely; 13.69% ($n = 79$) responded as unlikely, 5.89% ($n = 34$) very unlikely and 11.27% ($n = 65$) reported never using word-of-mouth to obtain video game information. Visual game reviews were second most popular source to obtain video game information from, 36.22% ($n = 209$) responded as likely and 23.92% ($n = 138$) as very likely; 12.13% ($n = 70$) responded as unlikely, 7.63% ($n = 44$) very unlikely and 20.10% ($n = 116$) reported never using video game reviews as a trustworthy source to obtain video game information.

Sharing information. The most likely used method of sharing game information (see Table 3) was word of mouth, 39.13% ($n = 225$) responded as likely and 26.43% ($n = 152$) as very likely; 10.96% ($n = 63$) responded as unlikely, 7.48% ($n = 43$) very unlikely and 16.00% ($n = 92$) reported never sharing video game information by word of mouth. The second most likely used method of sharing was social media, 26.88% ($n = 154$) responded as likely and 9.95% ($n = 57$) very likely; however, in total 63.18% ($n = 362$) responded as unlikely, very unlikely or has never shared video game information by social media. Unsurprisingly, written blogs and visual game reviews were ranked least likely to be used to share information – which may be attributed to the time commitment required for such activities.

Discussion

The pretest survey was carried out to investigate potential motivations to share video game information and to determine the most common methods of sharing. Measures of reciprocity, prerelease consumer behavior, video game identity, and social identity were all significantly related to participants' sharing tendencies. These results support the notion that video game players may share information to reciprocate previous exchanges or to enhance the gaming community. Moreover, the pretest results suggest word of mouth and visual game reviews as the two most likely used sources for seeking out video game information; and word of mouth as the most popular method of obtaining trustworthy video game information. Together these results inform the subsequent experiment by illuminating potential motivations to share and further support the prominence of word of mouth in this context. It should be noted, however, relationships found in the pretest survey do not tell us much about the process of video game information sharing, except that it takes place often and for related reasons. The main experiment examined sharing motivations further and also considers the effect content has on the process of sharing. Other relationships that yielded statistical significance that was not mentioned in the analysis should be explored further.

Main Experiment

Method

Design. The main experiment used a 3 (core game characteristic: control, narrative, and mechanics) X 3 (emotional appeal: control, awe, and hedonic) between-subjects factorial design to test for participants' intent to share game information after being expose various versions of a video game trailer. Movie trailers are often used as stimuli to study behavioral intention and product perception (Boksem & Simidts, 2015; Eliashberg, Jonker, Sawhney & Wierenga, 2000), but few if any studies have examined video game trailers in the same context. Administered through an online Qualtrics questionnaire, measures of participants' gaming tendencies and

motivations to share were collected prior to stimuli exposure, and measures of attitudes and intent to share were collected immediately following exposure.

   Participants. Initially, 232 undergraduate students were recruited from communication courses at Virginia Tech in exchange for course credit using a departmental research participation system. Five participants were eliminated from the analyses due to incomplete questionnaire, leaving a final sample of 227 participants for analyses. The 227 participants' mean video game hours played per week was .72 or 43 minutes per week ($SD = 1.07$) (Range = 0 – 5) and sex makeup was 60.35% ($n = 137$) female and 39.65% ($n = 90$) male. All study procedures were approved in advance by the Virginia Tech Institutional Review Board.

   Stimulus Materials. Stimulus materials are available at https://osf.io/jxbqs/?view_only=adb17fd6a555441f8aa24b6654942095. Five versions of a video game trailer were created as stimuli and participants were randomly assigned to one of the five The Star Citizen trailer used in this study was (after editing) one and a half minutes in duration and edited to manipulate variations of core game characteristics (narrative vs. awe), and emotional appeals (awe vs. hedonic). The trailer is entitled "Imagine: Star Citizen," and includes a montage of gameplay accompanied by a song. The trailer featured clips within a montage that are diverse, containing character interactions, gameplay in a variety of settings, landscape shots emphasizing the graphical components of space and planets within the game. Even though the trailer reveals a wide array of details through various visual representations, the trailer remains ambiguous enough that the purpose of the game is relatively unclear. To manipulate trailers to fit game characteristics and emotional appeals, large bold text condition-specific appeared a total of three times for four seconds each; text was applied within the video as it syncs with preexisting background music. Each trailer was only edited to the extent text was altered to fit

condition; every other facet of the trailer in terms of audio, visuals and duration was identical to each other. Additionally, the text included in each trailer was designed to be concise and was shown for twice as long as the preexisting trailer to ensure reader comprehension (four seconds of text display as opposed to two).

Condition-specific text display and corresponding timestamps in seconds follow (time between include a variety of in-game and cinematic clips of the game). Control: "THE BEST GAME OF THE YEAR" 12-16 sec.; "IS ALMOST HERE" 36-40; "ARE YOU READY?" 59-1:00. Mechanics/awe: "GAMEPLAY SO INSPIRING…" 12-16; "IT WILL CHANGE VIDEO GAMES…" 36-40; "FOREVER." 59-1:00. Mechanics/hedonic: "GAMEPLAY SO INTENSE…" 12-16; "YOU WILL PLAY…" 36-40; "FOREVER." 59-1:00. Narrative/awe: "A STORY SO INSPIRING…" 12-16; "IT WILL CHANGE VIDEO GAMES…" 36-40; "FOREVER." 59-1:00. Narrative/hedonic: "A STORY SO INTENSE…" 12-16; "YOU WILL PLAY…" 36-40; "FOREVER." 59-1:00. Awe-inspiring content often has to do with science and unthinkable or groundbreaking content (Berger & Milkman, 2011), so the wording to incorporate awe is derived from this simple definition; and hedonic wording is derived from Oliver & Bartsch (2010) that hedonic gratifications are generally characterized as enjoyable or fun.

Descriptive and Individual Measures.
Demographic measures. The pre-exposure questionnaire was administered to participants prior to stimulus exposure (see Appendix B) and included single-item measures assessing age, sex and year in school.

Table 1: Variable Correlations

	V1 Hours of video games per week	V2 Self-categorization	V3 Friend categorization	V4 Sharing tendencies	V5 Friends sharing tendencies	V6 Suggesting games to friend	V7 Friends suggesting games	V8 Game community (negative)	V9 Persuade friends to buy games	V10 Friends persuade to buy games	V11 Preorder tendencies	V12 Friends preorder tendencies	V13 Info sharing prerelease	V14 Game community (positive)	V15 Persuade to play games	V16 Friends persuade to play games	V17 Reciprocity – social benefit	V18 Reciprocity – direct measure	V19 Reciprocity – behavioral benefit
V1	-																		
V2	-.60*	-																	
V3	-.29*	.52*	-																
V4	-.45*	.73*	.52*	-															
V5	-.34*	.59*	.67*	.68*	-														
V6	-.44*	.72*	.53*	.81*	.66*	-													
V7	-.36*	.61*	.64*	.66*	.78*	.71*	-												
V8	.03	-.00	.07	.05	.03	.00	.02	-											
V9	-.42*	.69*	.49*	.76*	.61*	.79*	.65*	.05	-										
V10	-.37*	.59*	.60*	.64*	.71*	.65*	.75*	.07	.68*	-									
V11	-.36*	.54*	.33*	.56*	.41*	.51*	.39*	.04	.55*	.45*	-								
V12	-.19*	.35*	.57*	.42*	.57*	.41*	.58*	.06	.39*	.51*	.42*	-							
V13	-.41*	.61*	.45*	.71*	.60*	.66*	.58*	.01	.67*	.60*	.61*	.44*	-						
V14	-.14	.17*	.24*	.24*	.25*	.22*	.26*	.11	.22*	.23*	.13*	.26*	.17*	-					
V15	-.42*	.72*	.52*	.80*	.64*	.81*	.67*	.01	.80*	.63*	.52*	.43*	.64*	.23*	-				
V16	-.36*	.59*	.63*	.64*	.77*	.65*	.81*	.03	.63*	.75*	.38*	.53*	.55*	.28*	.64*	-			
V17	-.45*	.66*	.47*	.73*	.62*	.73*	.61*	-.00	.69*	.59*	.50*	.41*	.65*	.23*	.70*	.58*	-		
V18	-.35*	.59*	.49	.71*	.66*	.69*	.64*	.05	.69*	.61*	.51*	.41*	.67*	.23	.69*	.61*	.68*	-	
V19	-.41*	.71*	.52*	.77*	.63*	.78*	.69*	.04	.73*	.63*	.49*	.41*	.64*	.23*	.77*	.65*	.70*	.68*	-

* Correlations significant: *Measures:* Sharing tendencies (V4 & V5); Reciprocity (V6 - V7, V9 - V13, V15 – V19); Video game identity (V1 - V3); Prerelease consumer behavior (V11 - V13); Social identity (V8 & V14)

General video game measures. To collect descriptive data assessing participants'
general video game sharing tendencies and hours of video games played per day, a measure was
derived from Ivory & Kalyanaraman (2007). Using a 6-item measure, participants are asked to
answer 5-point Likert-type questions, ranging from Strongly Disagree to Strongly Agree,
assessing information sharing and video game play tendencies.

Motivations to share video game information. The measure of potential motivations
which can influence information sharing was adapted from Yan et al. (2016), and measures,
using a 16-item survey, the extent to which participants agree or disagree, ranging from 1 =
Strongly Disagree to 5 = Strongly Agree, with various reasons one would or would not share
video game information. Four items of the survey assessed the influence community
enhancement (i.e., social identity) has on participants' intent to share video game information
(Cronbach's α = .85). Six items of the survey assessed the influence reputation (i.e., self-
enhancement) has on participants' intent to share video game information (Cronbach's α = .90).
The remaining six items of the survey assessed the influence social support (i.e., reciprocity) has
on participants' intent to share video game information (Cronbach's α = .89). It is important to
note the present research used the same language and sentence structures as Yan et al. (2016)
developed survey; however, it adjusted the content accordingly to include measurements of
sharing specific to video games (see Appendix B).

Dependent Measures.
Attitudes and sharing intention. The dependent measure of intent to share video game
information was adapted from Lin (2006), and measured participants' attitudes and intentions
toward sharing the information gained from the stimulus. Participants' attitudes were measured
using 4-point item scales, for interpersonal sharing and online sharing, and used terms such as
"pleasant," "good," "beneficial" and "valuable" to assess participants' evaluation of video game

information sharing (Lin, 2006) (Cronbach's α = .81). Participants' behavioral sharing intentions were measured using a 4-point item scale which assessed the likelihood of information sharing also adapted from Lin (2006). Measures were adapted from Lin (2006) but customized to suit video game information sharing, rather than employee knowledge sharing on online platforms (Cronbach's: friends α = .89, online α = .87, overall α = .93)

Manipulation Checks. Included in the post-exposure survey were questions aimed to examine the extent to which the inclusion of awe and legitimacy of stimuli affected participants' willingness to share information. Added are questions such as, "does this game look fun," "does this article seem credible," etc. In addition, included are questions that ask fundamental information gathering and sharing tendencies outside of the video game context. This is especially important to check, for example, if an individual prefers visual presentations of information, then the trailer will have an inherent advantage regardless of content. Lastly, the apparentness of awe will be examined by asking participants whether or not the game seems "ground-breaking," or "thought-provoking" to ensure the success of the awe manipulations.

Results

Data preparation. Each individual open-response (for example: "how many hours of video games do you play per week," "how many hours a week do you spend sharing video games," etc. was reviewed by the researcher to ensure consistent values for further analysis. Specifically, the response "none" was changed to 0; means were calculated manually for responses provided as estimations (i.e., 2-4 hours; 3-5 hours, etc.); and for responses including greater-than values, the exact number entered was recorded (i.e., >4, coded as 4). One attitude measure assessing value of sharing was removed due to researcher error in creating collection instrument; the three remaining attitude measures maintained a Cronbach's α = .81.

Table 2: Methods of Obtaining Video Game Information

	Never	Very Unlikely	Unlikely	Likely	Very Likely	Total
Word of Mouth Critic	65 (11.27%)	34 (5.89%)	79 (13.69%)	288 (49.91%)	111 (19.24%)	577
Game Reviews	132 (22.96%)	63 (10.96%)	98 (17.04%)	209 (36.35%)	73 (12.70%)	575
Game Forums	181 (31.48%)	64 (11.13%)	110 (19.13%)	164 (28.52%)	56 (9.74%)	575
News Articles	147 (25.57%)	95 (16.52%)	127 (22.09%)	165 (28.70%)	41 (7.13%)	575
Visual Game Reviews (YouTube, etc.)	116 (20.10%)	44 (7.63%)	70 (12.13%)	209 (36.22%)	138 (23.92%)	577
In-shop – retail	135 (23.56%)	93 (16.23%)	120 (20.94%)	191 (33.33%)	34 (5.93%)	573

Table 3: Methods of Sharing Video Game Information

	Never used	Very Unlikely	Unlikely	Likely	Very Likely	Total
Word of Mouth	92 (16.00%)	43 (7.48%)	63 (10.96%)	225 (39.13%)	152 (26.43%)	575
Game Forums	308 (53.85%)	69 (12.06%)	104 (18.18%)	73 (12.76%)	18 (3.15%)	572
Written Blog	334 (58.19%)	85 (14.81%)	101 (17.60%)	51 (8.89%)	3 (0.52%)	574
Visual Game Review (YouTube, etc.)	240 (41.74%)	84 (14.61%)	99 (17.22%)	104 (18.09%)	48 (8.35%)	575
Social Media	185 (32.29%)	78 (13.61%)	99 (17.28%)	154 (26.88%)	57 (9.95%)	573

Motivations to Share *Star Citizen.*

Self-enhancement. Main experiment and pretest questionnaire data is available at https://osf.io/jxbqs/?view_only=adb17fd6a555441f8aa24b6654942095. H1a predicted that participants who reported sharing more video game information (hours per week) than they receive from their friends will be more motivated to share for self-enhancement reasons. It was found those who reported sharing more video game information on average than they receive from their friends ($M = 2.85$, $SD = .89$) revealed no significant relationship on motivations to share for self-enhancement, $r(18) = .32$, $p = .17$; therefore, H1a is unsupported.

H1b predicted that self-enhancing motivations would be positively correlated with attitudes towards sharing. A significant relationship was found between self-enhancement motivations and attitudes towards sharing, $r(226) = .18$, $p = .0062$; therefore, H1b is supported. H1c predicted self-enhancing motivations would be positively correlated with intent to share. A significant relationship was found between self-enhancement motivations and intent to share, $r(225) = .49$, $p < .0001$; therefore, H1c is supported.

Reciprocity. H2a predicted that participants who reported sharing less video game information (hours per week) than their friends would be motivated to share for reciprocity. Those who reported sharing less video game information than they receive from their friends revealed no significant relationship on motivations to share for reciprocal reasons, $r(40) = .14$, $p = .38$; therefore, H2a is unsupported.

H2b predicted reciprocal motivations would be positively correlated with attitudes towards sharing attitudes towards sharing. A significant relationship was found between reciprocal motivations and attitudes towards sharing, $r(225) = .15$, $p = .0267$; therefore; H2b is supported. H2c predicted reciprocal motivations would be positively correlated with intent to

share. A significant relationship was found between reciprocal motivations and intent to share, $r(225) = .49$, $p < .0001$; therefore; H2c is supported.

Community enhancement. H3a predicted participants who reported higher frequency of gameplay (hours per week) and higher video game friendship networks would be motivated to share for community enhancement. Hours played per week on average, $r(225) = .31$, $p < .0001$, and high video game friendship networks, $r(225) = .43$, $p < .0001$, both revealed significant relationships on motivation to share for community enhancement; therefore, H3a is supported.

H3b predicted participants' frequency of gameplay and extent of video game friendship networks would be positively correlated with attitudes towards sharing. It was found hours played per week on average, $r(225) = .06$, $p = .32$ was not significantly correlated with attitudes toward sharing; whereas high video game friendship networks, $r(225) = .14$, $p = .0418$, did reveal a significant relationship with attitudes toward sharing; therefore, H3b is partially supported. H3c predicted participants' frequency of gameplay and extent of video game friendship networks would be positively correlated with intent to share. Both hours played per week on average, $r(225) = .39$, $p < .0001$; and high video game friendship networks, $r(225) = .46$, $p < .0001$, were significantly correlated with intent to share; therefore, H3c is supported.

Method of Sharing. H4 predicted that participants' who intended to share *Star Citizen* information would be more likely to share with friends than online with members of the gaming community. A paired-samples t-test indicated a significant difference in participants' intent to share with friends ($M = 2.39$, $SD = 1.07$) and intent to share online with members of the gaming community ($M = 2.13$, $SD = 97$); $t(226) = 6.88$, $p = .0001$; therefore, H4 is supported.

Intent to Share.

Awe and Hedonic. H5 predicted participants exposed to game trailers incorporating elements of awe would have higher intent to share than game trailers incorporating elements of hedonic. A two-factor ANOVA, with awe and hedonic content characteristics as the independent variables and an eight item index relating to behavioral intent to share information as the dependent variables, revealed no significant difference in intent to share between participants in the hedonic condition ($M = 2.28$, $SD = 1.01$), participants in the awe condition ($M = 2.26$, $SD = .96$), and participants in the control condition ($M = 2.31$, $SD = .98$), $F(2, 224) = .13$, $p = .88$; thus, H5 is unsupported.

Narrative and Mechanics. H6 predicted participants exposed to game trailers incorporating elements of narrative would have higher intent to share than game trailers emphasizing mechanics. A two-factor ANOVA, with narrative and mechanics content characteristics as the independent variables and an eight-item index of behavioral intent to share information as the dependent variables, revealed no significant difference in intent to share between participants in the narrative condition ($M = 2.23$, $SD = 0.99$), participants in the mechanics condition ($M = 2.28$, $SD = .98$), and participant in the control condition ($M = 2.23$ $SD = .98$), $F(2, 224) = .12$, $p = .89$; therefore, H6 is unsupported.

Awe/Mechanics and Awe/Narrative. H7 predicted participants exposed to video game trailers incorporating both mechanics and awe would have higher intent to share than trailers incorporating both narrative and awe. A two-factor ANOVA, with awe content characteristics as the independent variables and an eight-item index of behavioral intent to share information as the dependent variables, revealed that there was no significant difference in intent to share between participants in the mechanics and awe condition ($M = 2.20$, $SD = .92$), participants in the

narrative and awe condition ($M = 2.26$, $SD = 1.02$), and participants in the control condition ($M = 2.31$, $SD = .98$), $F(2, 133) = .27$, $p = .84$; therefore, H7 is unsupported.

Hedonic/Narrative and Hedonic/Mechanics. H8 predicted participants exposed to video game video game trailers incorporating elements of narrative and hedonic will have higher intent to share than game trailers incorporating mechanics and hedonic. A two-factor ANOVA, with hedonic content characteristics as the independent variables and an eight-item index of behavioral intent to share information as the dependent variables revealed that there was no significant difference in intent to share between participants in the narrative and hedonic condition ($M = 2.20$, $SD = .98$), participants in the mechanics and hedonic condition ($M = 2.36$, $SD = 1.04$), and participants in the control condition ($M = 2.31$, $SD = .98$), $F(2, 133) = .32$, $p = .73$; therefore, H8 is unsupported.

For exploratory purposes the same two-factor ANOVA analyses were conducted on a smaller sample excluding all participants who reported zero hours of video game play per week ($n = 111$). In all of these exploratory ANOVA analyses, effects of the treatment remained nonsignificant ($p > .05$).

Genre Preference. The only research question inquired genre effect having an influence on sharing intention. A two-factor ANOVA, with eight possible video game genres as the independent variable and an eight-item index of behavioral intent to share information as the dependent variables, revealed a significant main effect of genre of game on intent to share $F(8, 218) = 2.77$, $p = .0062$. Post-hoc comparisons using Tukey's HSD method indicated scores in the First-person shooter genre ($M = 2.41$, $SD = .91$) had higher in intent to share than any other game genre, and was statistically different from both the Puzzle genre ($M = 2.02$, $SD = .75$) and the "No Opinion" option ($M = 1.89$, $SD = 1.00$).

Discussion

This thesis sought to contribute to word-of-mouth and viral marketing research in the context of anticipated prerelease video games by investigating external and internal motivations which drive intent to share specific information or content with friends. By focusing on video games specifically, these studies also help enrich researchers' understanding of how individuals within the video game community communicate with each other and the impact these ongoing interactions have on attitudes and intent to share information. Although it has been observed that content characteristics evoking feelings of awe can lead to more social sharing (Berger & Milkman, 2011), the same finding was not observed in the main experiment. However, participants' intent to share in all conditions was relatively high ($M = 2.26$), suggesting the trailers were well-received overall but manipulations were too similar to each other to have a significant difference between conditions. Similarly, core characteristics of video games emphasized in trailer conditions had no significant effect on intent to share information to friends or online.

The present survey revealed many relationships in support of using Social Exchange Theory and Social Identity Theory to understand sharing behavior within the video game community. First, results support notion that video game players share specific game-related content with each other (Nauroth et al., 2015) and those who share more often will be more likely to suggest specific games to friends. This finding is in line with Social Exchange Theory which posits those who perceivably hold more information about a specific topic will be more likely to share information concerning that topic for self-enhancing purposes. No significant relationship was observed between self-enhancing motivations and intent to share; whereas attitudes were found to be significantly related. This discrepancy in attitudes and intent to share is peculiar in this instance since attitudes were significantly related to intentions. This may be

attributed to the measures used to capture self-enhancement motivations. The index relied heavily on reputation enhancement which is only a facet of self-enhancement. One could be motivated to share to enhance various aspects of self which may be unrelated to reputation directly. Thus, a more precise measure for self-enhancing motivations may have yielded more consistent results. Further, those who were motivated to share information for self-enhancement purposes were significantly related to the extent in which they thought the game looked like fun. This may be interpreted as those who are motivated by self-enhancement are more likely to share games which seem fun or enjoyable.

Second, the pretest survey revealed those who share video game information with friends are likely to have friends who do the same. This supports the idea of reciprocity being a motivating factor when deciding whether or not to share game information. Indeed, participants who reported higher in reciprocal motivations were statistically related to both higher attitudes and intent to share. This is important for our understanding of the ongoing exchanges video game players are involved in further exemplifying the usefulness of Social Exchange Theory in this and similar media-constructed community contexts.

Third, results from the pretest questionnaire partially supports the idea that those who ascribe to the video game community will be more likely to share information. Motivations to share for community enhancement was as an important influencer of information sharing in the video game community. Video game identity measures (frequency of gameplay and game friendship networks) revealed partial support for higher attitudes toward sharing, finding participants who played video games more frequently each week were not significantly related to higher attitudes toward sharing; whereas high video game friendship networks were significantly related to higher attitudes. Further, it was observed that both video game identity measures were

significantly related to intent to share. Although attitudes were not significantly related to

frequency of gameplay, these findings suggest that those who ascribe to the video game

community are more likely to share to enhance the that community; and frequency of gameplay

and friendship networks together are appropriate predictors when determining extent of video

game identity.

The present studies failed to predict participants' motivations to share based on equity of

information. Self-enhancement motivations were predicted if participants' shared more

information than their friends did; and reciprocal motivations were predicted if participants'

received more information from their friends than they share. This method of determining

individual characteristics proved unsubstantial and resulted in a major loss of sample (those who

reported 0 were left out of analysis); thus, future research should consider more direct methods

of measuring these potential sharing predictors. Despite the lack of relationships between

motivations to share and equity of exchange, participants' who scored high on the video game

identity measures were observed as significantly related to sharing for community enhancement

reasons, which is consistent with Social Identity Theory. Indeed, these findings suggest video

game frequency and extent of friendship networks are both significant predictors of video game

identity (Nauroth et al., 2014).

Participants were significantly more likely to share with their friends than with members

of the gaming community online. Although the video game community is ubiquitous in online

settings, individuals still tend to share information through word-of-mouth with their friends.

Although contradictory results have been observed (Cox & Kaimann, 2014), the present studies

further illuminates the prevalence and influence word-of-mouth has on the video game

community. Further support comes from the pretest survey which revealed word of mouth and

visual game reviews as the most likely used sources for individuals seeking out and obtaining trustworthy video game information. This is in line with previous research (Hernandez & Vicdan, 2013) that video game players often attribute more importance on interpersonal sources or online reviews depending on the type of game being sought out. In addition, word of mouth was the most likely used method of sharing video game information over any online method.

The main experiment revealed no significant findings suggesting content characteristics and game element focus within the video game trailer had an effect on intent to share. The lack of support may be rightly attributed to failed manipulations within the video game trailers. It is uncertain whether participants read or glanced at the in-text pop-ups which were the only manipulations used to highlight aspects of narrative/mechanics features and awe/hedonic content. Consequently, the inclusion of awe and hedonic emotional appeals and extent of narrative and mechanics game features, were diluted by the remainder of the video game trailer that was not condition specific; thus, no noticeable effect of appeals and game features on intent to share was observed. Nevertheless, as seen from the case of *No Man's Sky*, something about these types of games spark prerelease chatter. Although trailers were not significantly different than each other in this case, they still proved as an externally valid stimuli based on the consistency of positive responses each condition received despite content.

Participants who reported "first-person shooter" as their favorite genre significantly predicted their intent to share, and was found to be significantly different than those who reported "No Opinion" or "Puzzle" genres as their favorite. This is a promising finding in that genre preference could be a large predictor of intent to share contingent upon the type of video game being presented. The *Star Citizen* trailer included multiple clips involving first-person shooter mechanics and these clips alone may have motivated intent to share for those who favor

that genre type. Further, those who do not enjoy games similar to *Star Citizen*, which primarily presents itself as a shooter/exploration game, are intuitively less likely to share information about it.

Limitations

There are several limitations which should be considered in the present research. First, each condition in the main experiment had only 12 seconds of condition-specific content so manipulations may have not been pronounced enough to elicit an emotional response of awe or hedonic enjoyment or highlight a game feature of narrative or mechanics successfully. Moreover, a pretest survey may had been beneficial to determine whether four seconds is enough time to read and comprehend the text within the game trailers.

Both studies did not allow for a diverse range of ages, which inhibits the ability to generalize these results to a broader population. Another limitation of the main experiment was the lack of video game players in the sample because almost half of the sample reported to not play any video games during the week, so results may had differed if the sample had more involved video game players, or at the very least interested.

The information sources chosen for the pretest survey was in no way exhaustive and could easily be condensed further into more precise methods of information sharing. For example, the option "Visual Game Reviews (YouTube etc.)" was vague and overarching, and could be potentially split up into user-generated videos (i.e., TV gaming programs, user reviews, etc.) and developer-generated videos (i.e., Video game trailer, in-game footage, etc.).

Future Research

While we know playing video games elicit specific experiences and emotions, the present research did not find support that these experiences and emotions are as poignant when presented as noninteractive media. Although these results may be most aptly explained by unsuccessful

manipulations, it could also be the case that game features and gaming experiences are not as relevant when someone is not physically playing the video game. Thus, future research should determine whether video game players respond to video game content similarly even when they aren't physically playing the game.

In addition to this, researchers should have a sample specific to the content they are studying. The present studies revealed those who played video games and talked about video games within friendship networks were significantly more likely to share. Thus, including individuals who don't play or care about video games have an inherent disinterest in the topic and are less likely to share content for any reason.

The present research assumed these features and experiences would have an effect on sharing behavior, because video game players have the capacity to understand this information as potential game features and experiences. Still, due to individuals not having an option to play particular video games prior to release, they are relatively reliant on this type of content to determine what a particular game is about. Because of this, it is essential for communication, advertising, and marketing researchers to continue expanding on prerelease information sharing among video game players due to the influence and freedom content generators have while a game is still in its prerelease stage. Research should also consider the role individual motivations have on the process of sharing, specifically game genre preferences and video game identity. Although some results were found in support of external motivations guiding sharing behavior (reciprocity & self-enhancement), community enhancement and individual genre preference were found to be the most significant predictors of intent to share.

Conclusion

There is still an extensive amount of research to be done before we can understand the effect of individual and external motivations guiding sharing behavior about games prerelease in

the video game community. The process of word-of-mouth sharing within the gaming community is complex, but understanding this process is essential when trying to understand what it is about prerelease games and their content that makes them so widely anticipated and shared. Although the main experiment found no significant findings suggesting content characteristics and game element focus having an effect on intent to share, it is still important for researchers to examine how individuals interpret relevant information to determine what type of content is most likely shared by whom and why. The rapid rise and fall of excitement surrounding the game *No Man's Sky* this past year showed that heightened anticipation for a game prerelease can culminate from something as seemingly minute as anticipated mechanical nuances emerging from a collective sense of awe. When seen from this perspective, video games reaching such heightened prerelease publicity becomes a more attainable feat for marketers and advertisers promoting particular games. Results from these studies suggest video game players are constantly sharing information with each other through word-of-mouth for a variety of reasons before video games are released, but the effect of content characteristics and game element focus on this process is still largely unknown and underdeveloped.

References

Alexandrov, A., Lilly, B., & Babakus, E. (2012). The effects of social- and self-motives on the
intentions to share positive and negative word of mouth. *Academy of Marketing Science*,
41(5)*,* 531-546. doi:10.1007/s11747-012-0323-4

Arriaga, P., Esteves, F., Carneiro, P., & Monteiro, M. B. (2006). Violent computer games and
their effects on state hostility and physiological arousal. *Aggressive Behavior, 32,* 358-
371. doi:10.1002/ab.20134

Bartsch, A., & Hartmann, T. (2015). The role of cognitive and affective challenge in
entertainment experience. *Communication Research, 23,* 243-260.
doi:10.1177/009365096023003001

Nauroth, P., Gollwitzer, M., Bender, J., & Rothmund, T. (2015). Gamers against science: The
case of the violent video games debate. *European Journal of Social Psychology, 44*(2)*,*
104-116. doi:10.1002/ejsp.1998

Berger, J., & Milkman, K. (2011). What makes online content viral? *Journal of Marketing
Research, 49*(2)*,* 192-205. doi:10.1509/jmr.10.0353

Bizzocchi, J., & Tanenbaum, J. (2012). Mass Effect 2: A case study in the design of game
narrative. *Bulletin of Science, Technology and Society, 32,* 393–404. doi:10.1177/
0270467612463796

Blau, Peter M. (1964). *Exchange and power in social life.* New York, NY: Wiley.

Boksem, M., & Smidts, A. (2015). Brain responses to movie trailers predict individual
preferences for movies and their population-wide commercial success. *Journal of
Marketing Research, 54*(2)*,* 1547-7193 (electronic). doi:10.1509/jmr.13.0572

Chan, M. (2014). Social identity gratifications of social network sites and their impact on collective action participation. *Asian Journal of Social Psychology, 17*(3), 229-235. doi:10.1111/ajsp.12068

Chintagunta, P. K., Gopinath, S., & Venkataraman, S. (2010). The effects of online user reviews on movie box office performance: Accounting for sequential rollout and aggregation across local markets. *Marketing Science, 29*(5), 944-957. doi:10.1287/mksc.1100.0572

Citizen, S. (2014). *Imagine: Star Citizen*. Retrieved from Video File: https://www.youtube.com/watch?v=lJJ9TcGxhNY

Cook, K. S., & Rice, E. (2003). Social exchange theory. In J. DeLamater (Ed.), *Handbook of Social Psychology* (pp.53-76). New York: Kluwer Academic/Plenum Publishers.

Cook, K. S., & Whitmeyer, J. M. (1992). Two approaches to social structure: Exchange theory and network analysis. *Annual Review of Sociology, 18*(1), 109-127. doi:10.1146/annurev.so.18.080192.000545

Cook, K. S., Emerson, R. M., Gillmore, M. R., & Yamagishi, T. (1983). The distribution of power in exchange networks: Theory and experimental results. *The American Journal of Sociology, 89*(2), 275-305.

Cox, J., & Kaimann, D. (2015). How do reviews from professional critics interact with other signals of product quality? Evidence from the video game industry. *Journal of Consumer Behavior, 14*(6), 366-377. doi:10.1002/cb.1553

Cropanzano, R., & Mitchell, S. M. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management, 31*(6), 874-900. doi:10.117710149206305279602

Eliashberg, J., Jonker, J.-J., Sawhney, M., & Wierenga, B. (2000). Moviemod: An

    implementable decision-support system for prerelease market evaluation of motion

    pictures. *Marketing Science, 19*(3)*,* 226-243. doi:10.1287/mksc.19.3.226.11796

Elliot, L., Golub, A., Ream, G., & Dunlap, E. (2012). Video game genre as a predictor of

    problem use. *Cyberpsychology, Behavior, and Social Networking, 15*(3)*,* 155-161.

    doi:10.1089/cyber.2011.0387

Elson, M., Breuer, J., Ivory, J., & Quandt, T. (2014). More than stories with buttons: Narrative,

    mechanics, and context as determinants of player experience in digital games. *Journal of*

    Communication, 64, 521-542. doi:10.1111/jcom.12096

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American*

    Sociological Review, 25(2)*,* 161-177.

Grove, F. D., Courtois, C., & Looy, J. V. (2014). How to be a gamer! Exploring personal and

    social indicators of gamer identity. *Journal of Computer-Mediated Communication, 21,*

    346-361. doi:10.1111/jcc4.12114

Hello Games Ltd (2016). *No Man's Sky* [Video Game]. Guilford, England

Hernandez, M. D., & Vicdan, H. (2013). Modeling word of mouth vs. media influence on

    videogame preorder decisions:A qualitative approach . *Journal of Retailing and*

    Consumer Services, 21, 401-406. doi:10.1016/j.jretconser.2013.11.003

Hirschman, E. C., & Wallendorf, M. (1982). Motives underlying marketing information

    acquisition and knowledge transfer. *Journal of Advertising, 11*(2)*,* 25-31.

    doi:10.1080/00913367.1982.10672809

Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology, 63*(6)*,* 597-

    606.

Ivory, J. D., & Kalyanaraman, S. (2007). The effects of technological advancement and violent content in video games on players' feelings of presence, involvement, physiological arousal, and aggression. *Journal of Communication, 57*(3)*,* 532-555. doi:10.1111/j.1460-2466.2007.00356.x

Jeffery, M. (2016, August). *No Man's Sky Active Players Drops By 90%*. Retrieved November 20, 2016, from GameRant: https://gamerant.com/no-mans-sky-players-drop/

Jin, B., Park, Y. J., & Kim, H.-S. (2010). What makes online community members commit? A social exchange perspective. *Behaviour & Information Technology, 29*(6)*,* 587-599. doi:10.1080/0144929X.2010.497563

Keltner, D., & Haidt, J. (2003). How to know and choose online games: Differences between current and potential players. *Cognition and Emotion, 10*(6)*,* 297-314. doi:10.1089/cpb.2007.9944

Lawler, E. J., & Thye, S. R. (1999). Bringing emotions into social exchange theory. *Annual Review of Sociology, 25,* 217-244.

Lin, H.-F. (2007). Effects of extrinsic and intrinsic motivation on employee knowledge sharing intentions. *Journal of Information Science, 33*(2)*,* 135-149. doi:10.1177/0165551506068174

Liu, Y.-L., & Keng, C.-J. (2014). Coginitive dissonance, social comparison, and disseminating untruthful or negative truthul ewom messages. *Social Behavior and Personality, 42*(6)*,* 979-994. doi:10.2224/sbp.2014.42.6.979

Martinez, S. J., Samaniego, M. C., & Martinez, I. J. (2015). Transmission of values in adolescents: An analysis with video games. *Comunicación Social, 70,* 230-251. doi:10.1371/journal.pone.0144110

Molm, L. D., Quist, T. M., & Wiseley, P. A. (1993). Reciprocal justice and strategies of

    exchange. *Social Forces, 72*(1)*,* 19-44.

O'Connor, E. L., Longman, H., White, K. M., & Obst, P. L. (2015). Sense of community, social

    identity and social support among players of massively multiplayer online games

    (MMOGs): A qualitative analysis. *Journal of Community & Applied Social Psychology,*

    25(6)*,* 459–473. doi:10.1002/casp.2224

Oliver, M. B., Kalyanaraman, S., Mahood, C., & Ramasubramanian. (2007). Sexual and violent

    imagery in movie previews: Effects on viewers' perceptions and anticipated enjoyment.

    Journal of Broadcasting & Electronic Media, 51(4)*,* 596-614.

    doi:10.1080/08838150701626446

Oliver, M., Bowman, N., Woolley, J., Rogers, R., Sherrick, B., & Chung, M. (2015). Video

    games as meaningful entertainment experiences. *Psychology of Popular Media Culture.*

    doi: 10.1037/ppm0000066

Poels, K., Hoogen, W., Ijsselsteijn, W., & Kort, Y. (2012). Pleasure to play, arousal to stay: The

    effect of player emotions on digital game preferences and playing time.

    Cyberpsychology, behavior, and social networking, 15(1)*,* 1-5.

    doi:10.1089/cyber.2010.0040

Przybylski, A. K., & Rigby, C. S., & Ryan, R.M. (2010). A motivational model of video game

    engagement. *Review of General Psychology, 14,* 154-166. doi:10.1037/a0019440

Roberts Space Industries. (2016). Retrieved November 2016, from Star Citizen Website:

    https://robertsspaceindustries.com/

Shen, K. N., Yu, Y. A., & Khalifa, M. (2010). Knowledge contribution in virtual communities: accounting for multiple dimensions of social presence through social identity. *Behaviour & Information Technology, 29*(4)*,* 337-348. doi:10.1080/01449290903156622

Simpson, B., & Macy, M. (2004). Power, identity, and collective action in social exchange. *Social Forces, 82*(4)*,* 1373-1409. doi:10.1353/sof.2004.0096

Suderman, P. (2016, August 29). *No Man's Sky is an existential crisis simulator disguised as a space exploration game.* Retrieved from International Society For Presence Research: http://ispr.info/2016/08/29/no-mans-sky-is-an-existential-crisis-simulator-disguised-as-a-space-exploration-game/

Tamborini, R., Grizzard, M., Bowman, N. D., Reinecke, L., Lewis, R. J., & Eden, A. (2011). Media enjoyment as need satisfaction: The contribution of hedonic and nonhedonic needs. *Journal of Communication, 61,* 1025-1042. doi**:**10.1111/j.1460-2466.2011.01593.x

Thibaut, J.W., & Kelley, H. H. (1959). *The social pyschology of groups.* New York, NY: Wiley.

Turner, J., & Tajfel, H. (1986). The social identity theory of intergroup behavior. *Pyschology of intergroup relations, 5,* 7-24.

Wein, A. H., & Olsen, S. O. (2014). Understanding the relationship between individualism and word of mouth: A self-enhancement explanation. *Psychology and Marketing, 31*(6)*,* 416-425. doi:10.1002/mar.20704

Appendix A – Pretest Questionnaire

How often do you play video games?

Open-response answer – hours per week

Would you consider yourself an avid video game player?

1 (strongly disagree) – 3 (neither agree nor disagree) - 5 (strongly agree)

Would you consider your friends to be avid video game players?

1 (strongly disagree) - 5 (strongly agree)

Do you often share information about video games?

1 (strongly disagree) - 5 (strongly agree)

Do your friends often share information about video games with you?

1 (strongly disagree) - 5 (strongly agree)

Do you often suggest particular video games to your friends?

1 (strongly disagree) - 5 (strongly agree)

Do your friends often suggest particular video games to you?

1 (strongly disagree) - 5 (strongly agree)

Do you think the term "gamers" is often stigmatized?

1 (strongly disagree) - 5 (strongly agree)

Do you think "gamers" have a strong sense of community?

1 (strongly disagree) - 5 (strongly agree)

Do you often try to persuade your friends to purchase particular video games?

1 (strongly disagree) - 5 (strongly agree)

Do your friends often try to persuade you into purchasing particular video games?

1 (strongly disagree) - 5 (strongly agree)

Do you often try to persuade your friends to play particular video games?

1 (strongly disagree) - 5 (strongly agree)

Do your friends often try to persuade you into playing particular video games?

1 (strongly disagree) - 5 (strongly agree)

Do you share video game information in order to have someone to talk to about it?

1 (strongly disagree) - 5 (strongly agree)

Do you share video game information because your friends often do the same?

1 (strongly disagree) - 5 (strongly agree)

Do you share video game information with friends in the hopes of playing together?

1 (strongly disagree) - 5 (strongly agree)

Do you often pre-order video games?

1 (strongly disagree) - 5 (strongly agree)

Do your friends often pre-order video games?

1 (strongly disagree) - 5 (strongly agree)

Please rank these information sources by the likelihood in which you would use to obtain

trustworthy video game information? (1 being most reliable)

Word of mouth

Critic game reviews

Game forums

News articles

Oral game reviews (YouTube, vimeo, etc.)

In-shop – retail (on the spot while scanning)

Advertisements/promotions (trailers, commercials, etc.)

Please rank these information sources by the likelihood in which you would share video game

information through (1 being the most used)

Word of mouth

Online forums

Online blog

Video Blog

Social media

Appendix B – The Main Experiment Collection Instruments
General questions (derived from Ivory & Kalyanaraman)

1. What is your gender?

2. What is your age?

3. Year in school?

4. On average, how many hours a day do you spend playing video games?

5. On average, how many hours a day do you spend sharing information about video games? (face-to-face or online)

6. On average, how many hours a day do you spend receiving information about video games online?

7. On average, how many hours a day do you spend receiving information about video games from friends?

8. Would you consider yourself apart of the video game community?

9. Would you consider the majority of your friends to be apart of the video game community?

10. What is your favorite genre of video games?

    a. Action/adventure, shooters, puzzle, role-playing, sports, arcade

General sharing questions – taken from Yan et al. (2016)

Community value (social identity)

1. Sharing video game information online will help other members in the gaming community solve problems

2. Sharing video game information online will bring positive influence on other members in the gaming community

3. Sharing video game information with friends will help them solve problems

4. Sharing video game information with friends will bring positive influence on them

Reputation (self-enhancement)

1. Sharing video game information online can enhance my reputation in the gaming community

2. Sharing video game information with friends can enhance my reputation in friend group

3. Sharing video game information online is often very much appreciated by others in the gaming community

4. Sharing video game information with friends is often very much appreciated by them

5. Sharing video game information online improves my status in the gaming community

6. Sharing video game information improves my status with my friends

Social support (reciprocity)

1. Sharing video game information online helps me feel relaxed

2. Sharing video game information with friends help me feel relaxed

3. By sharing video game information online, I often receive support or comfort from other members in the video game community

4. By sharing video game information with friends, I often receive support or comfort from them

5. I often feel obliged to share video game information online

6. I often feel obliged to share video game information with friends

Survey questions after stimulus (manipulation checks)

1. Does this game look fun?

2. Does this game look well made?

3. Does this game look like it would have a great story?

4. Does this game look awe-inspiring?

5. Does this (article) content look legitimate?

6. Does this (article) content look credible?

7. Generally, do you prefer receiving information visually?

8. Generally, do you prefer receiving information through written words?

9. Would you consider pre-ordering this game?

10. Would you pre-order this game if your friend did?

11. Would you attempt to convince a friend to pre-order this game?

12. Would you pre-order this game if members of the gaming community online did?

13. Would you try to convince members of the gaming community to pre-order this game online?

Sharing intention – based on TRA that beliefs influence attitudes and they subsequently influence intention - H-F. Lin (2006)

1. If I were to share the information I just gained from the trailer it would be …

Very unpleasant … very pleasant

Very bad … very good

Very worthless … very valuable

Very harmful … very beneficial

2. I intend to share information about this game to my friends

3. I intend to share information about this game online

4. I intend to share information about this game with friends if they ask for it specifically

5. I intend to share information about this game online if someone asks for it specifically

Appendix C - Pretest Questionnaire IRB Approval

VirginiaTech

Office of Research Compliance
Institutional Review Board
North End Center, Suite 4120, Virginia Tech
300 Turner Street NW
Blacksburg, Virginia 24061
540/231-4606 Fax 540/231-0959
email irb@vt.edu
website http://www.irb.vt.edu

MEMORANDUM

DATE:	November 28, 2016
TO:	James Dee Ivory, Logan Bryan Blankenbeckler
FROM:	Virginia Tech Institutional Review Board (FWA00000572, expires January 29, 2021)
PROTOCOL TITLE:	Video Game Information Sharing Tendencies
IRB NUMBER:	**16-1068**

Effective November 28, 2016, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

http://www.irb.vt.edu/pages/responsibilities.htm

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As:	**Exempt, under 45 CFR 46.110 category(ies) 2**
Protocol Approval Date:	**November 28, 2016**
Protocol Expiration Date:	**N/A**
Continuing Review Due Date*:	**N/A**

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.
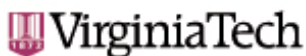
— *Invent the Future* —

Date*	OSP Number	Sponsor	Grant Comparison Conducted?

* Date this proposal number was compared, assessed as not requiring comparison, or comparison information was revised.

If this IRB protocol is to cover any other grant proposals, please contact the IRB office (irbadmin@vt. edu) immediately.

Appendix D - Main Experiment IRB Approval

Virginia Tech

Office of Research Compliance
Institutional Review Board
North End Center, Suite 4120, Virginia Tech
300 Turner Street NW
Blacksburg, Virginia 24061
540/231-4606 Fax 540/231-0959
email irb@vt.edu
website http://www.irb.vt.edu

MEMORANDUM

DATE:	March 21, 2017
TO:	James Dee Ivory, Logan Bryan Blankenbeckler
FROM:	Virginia Tech Institutional Review Board (FWA00000572, expires January 29, 2021)
PROTOCOL TITLE:	Motivations to Share Video Game Information
IRB NUMBER:	**17-276**

Effective March 21, 2017, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

http://www.irb.vt.edu/pages/responsibilities.htm

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As:	**Exempt, under 45 CFR 46.110 category(ies) 2**
Protocol Approval Date:	**March 21, 2017**
Protocol Expiration Date:	**N/A**
Continuing Review Due Date*:	**N/A**

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

— *Invent the Future* —

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
An equal opportunity, affirmative action institution

Date*	OSP Number	Sponsor	Grant Comparison Conducted?

* Date this proposal number was compared, assessed as not requiring comparison, or comparison information was revised.

If this IRB protocol is to cover any other grant proposals, please contact the IRB office (irbadmin@vt.edu) immediately.