

VIDEO PLAY PATHWAYS FOR FEMALES: DEVELOPING THEORY

A Thesis

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by

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## ABSTRACT

This study explores the diversity of females in the realm of video games. Previous studies have focused on the differences between males and females in order to understand the dearth of female gamers. However, these studies have failed to acknowledge that even among subjects of the same gender, great diversity can, and does, exist. For this reason, the research contained herein will focus solely on females; trying to understand what sets female gamers (for they *do* exist) apart from female non-gamers.

The main question guiding this thesis is; “How do female gamers and non-gamers differ in their perceptions of and engagements with video games?” That is, how do members of each group (gamer vs. non-gamer) tend to define videogames? How and why do they interact with them (for social reasons, for the challenge, to relieve boredom, because they are conveniently available, etc.) if they interact with them at all? How do their videogame experiences relate to childhood experiences, non-game interests/skills, and social climate if there is any correlation at all?

The project sought out women who have set themselves apart by participating in game-related activities (the Cornell Dance Dance Revolution Club and the Game Design Initiative at Cornell) and compared their experiences and opinions to those of women who neither participate in these activities nor would consider themselves “gamers” in any other way. Some of these non-gamers were found among participants in a pilot study. Others were found within COMM201—an undergraduate communication class. In-depth one-on-one interviews provided the data that helps us to see the complexity of the female game experience.

Results of the study indicate that the dearth of female gamers may be tied to social factors more than the psychological ones some scholars have proposed. At younger ages, females seem to generally enjoy video games and other recreational

technologies however, with maturity and gender socialization come a mindset that “women don’t play video games”. In order to overcome the gaming gender gap, it may be necessary to change the way we as researchers think about games in order to change the way that women think about them. Furthermore, in order to advance the field of video game research, it may be necessary to question some popular assumptions, and press for standardized definitions of the major terminology.

## BIOGRAPHICAL SKETCH

Meredith Aquila is a graduate of the Indiana University College of Arts and Sciences. Her undergraduate work focused on film and television in the department of Communication and Culture and media and society in the department of Telecommunications. In addition to these two majors, she also earned a minor in Spanish.

After graduation, she joined the Communication program at Cornell University where her focus was gender issues in the field of video game research. During the course of her studies, she also served as a teaching assistant. Following successful completion of her masters degree, she hopes to take up a teaching position in the field of Communication.

This thesis is dedicated to the memory of Professor Austin Caswell, a scholar and a gentleman who inspired us to think deeply, speak freely, and whenever possible, sit on the floor.

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## ABBREVIATIONS AND TERMS

AI : Artificial Intelligence

DDR: Dance Dance Revolution (a challenging dance-step video game)

MMORPG: Massively Multi-Player Online Role-Playing Game

Console: gaming system hardware

# VIDEO PLAY PATHWAYS FOR FEMALES: DEVELOPING THEORY

## CHAPTER 1: LITERATURE REVIEW AND RESEARCH QUESTIONS

This thesis further explores the subject of gender and video games.

Specifically, data were collected to better understand the well-documented dearth of female<sup>1</sup> video game players in American society. A field study focusing on the habits, histories, personalities, and opinions of a number of young women who have grown up in the era of the video game is described in detail.

This chapter includes background information, a literature review, and results from a pilot study as a foundation to justify the study's methods. Research questions and methods are explained further and supported in Chapter 2. Chapter 3 presents the study data. Data are then analyzed and discussed in Chapters 4 and 5. Chapter 6 covers the significance, limitations, and possible applications of the findings while also considering directions for future research. References are listed at the end.

Video game research is a young and only partially developed area of scholarly concern. Early research was often met with suspicion and even ridicule (Pearce 2002). Today, video games are more commonly seen as a viable new medium worthy of academic attention but not enough time has elapsed yet to allow the field to fully blossom. There are many perspectives on video games, and many possible methods for exploring them. Although very few conclusions have been drawn at this time,

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<sup>1</sup> For my purposes, “girl” refers to any female under the age of 18, “woman” refers to any female aged 18 or older, and “female” refers to any female regardless of age. Females almost certainly perceive and interact with games differently than males, but in order to better understand these differences, I have opted to focus on *women*—females who have reached an age when they are most likely to strongly contrast with males in their gaming habits and opinions.

numerous solid projects have been completed which offer us direction and inspiration to take the next steps as a field. De Castell and Jenson (2003) sum up the research thus far into the following categories:

1. Play and Pleasure—theories of play; structures, functions, outcomes, considerations of the elements of pleasure, entertainment, enjoyment, and psychoanalytical perspectives, mostly restricted to childhood studies
2. Genre—studies that articulate commonalities and distinctions between simulations and games, and games and subtypes of games
3. Game Development—systems, content, graphics, AI, rule-systems, playability, etc.
4. Narrative—based in literary theory, narrative elements, analysis, plot-structures, characterization, setting, dialogue, etc.
5. Effects—psychological, behavioral and cognitive effects of gaming, especially violence. Emphasis on plot analysis, characters, depictions of violence, causation/behavioral effects, etc.
6. Gender—gendered play and game preferences
7. Constructionism—study of children as game designers, considers designs and learning as children create their own games

The majority of scholarship has been concerned with effects. The most common question asked has been whether or not violent content has an effect on young game players, and if so, to what extent? To a lesser degree, questions of gender portrayals and their effects on perceptions of gender have been raised. De Castell and Jenson's other categories have been developed much less thoroughly but hold a great

deal of promise as sites of rich and intriguing materials for academics, politicians, consumers, designers, and marketers.

One question stands out as being often asked, but rarely answered in any satisfying way: Why do females tend to play and enjoy video games to a much lesser degree than males? This question concerns not only theorists and scholars, but educators, parents, and policy-makers as well because many of them see video games as a technology gateway for young people. Many believe that in the information age, any technology that can make children feel comfortable and empowered can be an important tool for development. A few individuals have even gone as far as studying ways in which technology can be integrated into the classroom for digitally enhanced learning (Kirriemuir 2002, Jenkins, Klopfer, Squire, & Tan 2003, Mangan 2005).

As long as girls and women fall behind men in their use of computers and consoles for recreation, there is reason to believe that they will tend to feel less empowered than will males to work with and manipulate technology. Most males apparently come to enjoy technology from an early age and continue to feel positively toward it throughout their lives. Looking at the gender gap in computer science and informational technology career fields (Rabasca 2000, Nzegwu 2000, Laurel 2001, Hafner 2004), we see an aura of optimism surrounding the concept of embracing video games. If something as simple as gaming can break down gender technological inequality in the workplace, it is necessarily a medium with which to reckon. However, this assumption that video game play will bridge the digital gender divide should be viewed with skepticism and treated with caution, as we shall see later.

Regarding the larger question of gendered play, some theorists have considered a biological answer; that females simply do not care for technology the way that males do. Certainly, men and women respond to technology differently, with women tending to focus on communication and integration, and men tending to focus on control and

manipulation (Brunner, Bennett & Honey 1999). Further, males and females even seem to look for different types of challenges and rewards in play such as spatial challenges versus logic challenges, and competition versus cooperation with certain “male” preferences being better represented in the average video game (Kafai 1999, Lucas & Sherry 2004, Rabasca 2000). However, these differences—though they are clearly tied to gender—are not necessarily innate factors of the sex chromosomes.

Research indicates that males and females do not seem to begin their early lives with any noticeable gap in use of technology, at least not in their desire to engage it. Calvert, Rideout, Woolard, Barr, and Strouse (2005) found in their studies that

“[t]here were almost no gender differences in early computer patterns... older boys seemed to use computers more so than older girls, but at younger ages a gender divide was not present” (p. 590).

Cassell and Jenkins (1999) also pointed out that “None of [the existing] research shows that girls are inherently less skilled at computer tasks than boys” (p. 13). These studies indicate that whatever inherent differences may exist in the way that males and females relate to technology, they are not significant enough to either encourage or discourage the use of technology in and of themselves. Something in the maturation period and socialization process apparently affects the extent to which females engage or avoid engaging with technological processes and mechanisms related to computer and video game play (and perhaps consequently, cutting-edge careers).

Degree of video game access is not a simple explanation either. Although access to computers has increased over time with gender gaps decreasing in the areas

of technological skill and computer use in the 3-17 age group (Calvert, Rideout, Woolard, Barr & Strouse 2005) Colley and Comber (2003) found that even with increased exposure to computers (due to increasing prevalence of systems in schools, homes, and libraries) in recent years, in later stages of development:

“...some gender differences [remain], particularly in attitudes. Boys still [like] computers more, [are] more self-confident in their use and, unlike previously, [sex-type] them less than girls. They also [use] computers more frequently out of school, particularly for playing games. There [is] some evidence that, as found previously, older girls [hold] the least positive attitudes, and it is suggested that their approach to computers may be influenced by the cultural pressures of gender stereotyping.... Although [there is] evidence of some change since the early 1990s, increased exposure to computers has not closed the gender gap” (155).

Laurel (2001) points out that many parents *try* to encourage their young daughters to play with video games the way their sons do (with the hope that they will come to love computing), but they are met with resistance at every turn. This seems to indicate that simply providing or not providing video games would not necessarily affect a girl’s desire to play with them.

In further support of a primarily sociological perspective of gendered play rather than a primarily psychological view<sup>2</sup>, Funk and Buchman (1994) found that as preteen girls’ self-concept scores dropped, their use of video games increased. These self-concept scores considered self reported levels of confidence and feelings of being

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<sup>2</sup> We say “primarily” here because it is impossible to fully separate sociology from psychology. In gender and play, the two perspectives are consistently fused together and although one may dominate slightly in its influence on behavior, an individual would be hard pressed to show that it is the *only* influence on behavior.

accepted by peers. This may indicate that it is generally females who are less likely to “fit in” who are playing video games as they get older, whereas females who feel confident and accepted have a lesser desire to play video games. This supports the idea that it is less a matter of biology and more a matter of sociology whether or not an individual likes video games. A sociological framework would also tend to support the argument that video games hold less appeal for females due to elements of content.

Some scholars have explored the possibility that females don’t play video games because video games do not mesh with feminine norms of play. As mentioned, men and women seem to prefer different types of challenges and most video games tend to represent male tastes more than female tastes (Kafai 1999, Lucas & Sherry 2004, Rabasca 2000). This may be a result of the industry’s demographics. Most designers, producers, marketers, and programmers in the video game field are male and so it is rather difficult for manufacturers to *know* how to attract female interest (Rabasca 2000, Nzegwu 2000, Laurel 2001, Hafner 2004).

Additionally, many games go so far as to potentially exclude females by either representing women only marginally with a limited number of female characters or representing women inappropriately as excessively sexual, passive, or ineffective. In other words, women cannot find themselves in video games and for that reason, they may not be interested in playing (Rabasca 2000, Children Now 2001, Laurel 2001, Castronova 2004, Ivory 2006). This would help explain Funk and Buchman’s (1996a) findings that the “average” girl does not play video games, only the girl who falls outside her peer-mainstream.

Going along with the idea of content-based play discouragement, play theory has been applied to video games, exploring girls’ play tendencies which involve social skill-building and relationship-based play. Some scholars have suggested that the way

females play is not (and perhaps cannot be) supported by the video game medium. Females seem to prefer social play without much competition. They emphasize cooperation rather than competition, competition generally being preferred by males.

In 2004, Pellegrini, Blatchford, Kato and Baines conducted a short-term longitudinal study of children's playground games in primary school. This study described changes in children's games as they progressed in school, noting age and gender differences in play. Generally, boys came to play more games, and more complex games, than did girls.

“... boys engaged in more total games, ball games, and chase games than did girls. Girls engaged in more jumping/verbal games, such as jump rope and clapping/chanting games... boys are more physically active than girls... Girls, on the other hand, are more sedentary and verbally more facile than boys. Games utilizing these skills, such as jump rope, chanting, and clapping games, showed corresponding female preferences.... Girls participated in fewer games and ball games with time. Also consistent with the hypothesis these results support the notion that gender role stereotypic behavior is socialized in peer groups at school. Girls find the playground unpleasant and spend less time in competitive games than boys and games. [There is] anecdotal evidence of English girls complaining that their outdoor breaks are too long and pretending to be sick so that they do not have to go out on the playground during break. When they are compelled to go outdoors, our data show that they do not participate in games on the same level as boys” (p. 117).

De Jean, Upitis, Koch, and Young (1999) found in a 1993 study that:

“substantial gender differences in what children liked in electronic games. While the majority of girls felt that the important elements were storyline, characters,

worthwhile goals, social interactions, creative activities and challenge, most boys liked the elements of entertainment, fast action and adventure, challenge, and violence...” (p. 208).

Their 1999 study added to this with a look at “Phoenix Quest”—a children’s learning game for the computer. Phoenix Quest was intended to encourage learning in language and mathematics, while offering features that were thought to appeal specifically to girls.

“The findings provided evidence that PQ appealed to girls because the protagonist was of their age and gender, and because the puzzles and searches were engaging throughout the game... more girls than boys used the postcard-writing feature of PQ and appreciated following the adventures of a female protagonist. More boys than girls were reported to offer advice to other students, discuss the game during their free time, and observe others playing the game. Some boys even formed groups to exchange information and game-playing strategies... Both the case study and the large-scale study revealed that among computer games, PQ’s uncommon approach of celebrating and challenging a female protagonist is important to girls” (p. 217-218).

Most video games available currently do not allow much room to play with narrative, characters, relationships, or other elements associated with female play. There are a few exceptions that have been explored recently such as *The Sims* and *EverQuest*—games that allow maximum customization and the kind of open-ended play that girls seem to prefer. (Taylor & Kolko 2003, Nutt & Railton 2003, Schiesel 2005a)

There are no definitive goals in these types of games. Players have many paths they may take through the games, some of which involve social network-building and relationship role-playing (Nutt & Railton 2003, Schiesel 2005a) and they are some of the few exceptions to the “girls don’t play videogames” rule. Games such as these suggest that it is possible to attract more girls to video games if only game designers experiment with increasingly diverse formats.

It is important to remember, however, that this idea of the cooperative-play female leaves female gamers (for they *do* exist) out of the equation. If females truly do tend to prefer cooperation, how can we explain professional, competitive, female gaming groups? Although these women represent a definite minority, they are a significant minority and they confound efforts to explain female play easily.

As we have seen, there are currently many people trying to explain the dearth of female gamers. These researchers and theorists have provided us with many ideas and recommendations for understanding video games and gendered play, but each of them comes up just a little bit short. Part of the difficulty in supporting these individual theories-in-progress is that there is a dearth of reliable data in the gender area of video game studies. Most studies mentioned are very new and often the first of their kind. Under these circumstances, there is not much foundation for any definitive conclusions. There are still too many generalizations to break down, assumptions to question, and results to reproduce.

Many authors seem to believe that girls and boys simply develop their play habits differently as they mature. This is possible, but it is difficult to know for sure as many studies ignore context, peer interaction, and home life as they seek to explain gender phenomena (Pellegrini, Blatchford, Kato & Baines 2004), while many more seem guilty of bringing gender stereotypes into the mix as they attempt to observe

children at play (De Jean, Upitis, Koch, & Young 1999). Such authors begin their research with the *assumption* that males and females are inherently different and this undoubtedly colors their results and conclusions. Likewise, the assumption that the encouragement of video game play will encourage technological proficiency is common, but inherently flawed. At this time, there is no evidence for this assumption—only an observation that males are more likely to enjoy video games and go into technology-related careers than are females.

The hasty conclusion that video games are the key to occupational gender equality causes researchers to ignore outliers (female gamers, males that dislike video games, women who love technology but may not play video games, etc.), lose focus on larger issues of the field such as standardization of definitions and examination of popular perceptions of video games (which we shall see later is a complex issue among women), and fail to notice and question common misconceptions and stereotypes carried by researchers and much of the American public. In this thesis, I will show that the inherent flaws in video game research are a major inhibiting factor in the field's progress and suggest new ways of looking at video game play, gender, and the field itself.

The original concern guiding this project was the broad existence of gender stereotypes in the current research. A great number of comparisons have been made between males and females that seem to fail to acknowledge the diversity within each gender. Clearly, some females love video games. The Interactive Digital Software Association's website estimates (perhaps over-optimistically) that 43% of game players are women (IDSA 2003), and one may find numerous websites created by and for female gamers (i.e., womengamers.com), but we are no closer to knowing why. Are these women just tom boys? Do they know something that their non game-playing counterparts do not? Have they merely been exposed to games more frequently? Are

they playing games that are different from the popular ones we come across in most academic studies? Unfortunately, most existing studies are conducted with the assumption that females do not like video games and this has prevented much complex thought regarding the diversity of females in their perceptions of, and experiences with, video games.

Although there is currently no real video game theory (with the possible exception of some tentative theorizing being done in the puzzle/game design arena), scholars continue to apply existing theories to video game studies in the hope of building unique, new models and theoretical frameworks through which to better understand this new medium. Because video games are so different from previous media (more interactive, more customizable, more demanding of focus, attention, dexterity, and technical knowledge, etc.), it is difficult to apply older models. However, this difficulty is no excuse for ignoring existing theories entirely. A great deal can be learned about what video games are and aren't by comparing and contrasting them to previous media and by looking at human-game interaction within the context of existing social network theories, play and gender models, and well-established social and psychological frameworks.

In the case of this study, I have found it interesting and useful to examine gender studies, game studies, and general media studies in order to better understand my data and possible implications. While I have not found a single unifying theory, I *have* discovered several useful works that merit further examination, as well as a few studies that may require closer scrutiny.

### The Communication Perspective

The study of communication has gone through various paradigms or stages, especially in terms of assumptions about media messages and audiences. These stages

can be seen in the evolution of media studies such as those surrounding television and film. Initially, we can find a great deal of concern and suspicion as assumptions abound about media effects and passive audiences; however, over time, audiences gain control in the eyes of researchers and new media become increasingly benign and even beneficial in their perceived effects (Lowry & De Fleur 1983, Bauer 1971, Craig, 1999).

Video games may well be going through a similar period of scholarly evolution. Many of the concerns surrounding gaming are similar to those that were voiced in the early days of television and movies. These include: potential negative effects on audience behavior, possibilities for propaganda or transmission of anti-social messages, and unrealistic portrayals of race, gender, societal norms, etc. While many of these concerns are still alive and well in the fields of film and television studies, their power is tempered by the balancing effect of perceived possible benefits: film as an art form, television as a learning tool, mass media as a window to the world.

Although video games still have a dark shadow surrounding them, there is also an ever-increasing light. Educational games are quite common, video games are being explored as an art form and a source of narrative, MMORPGs (Massively Multiplayer Online Role-Playing Games) and their chat boards are showing themselves to be a tool of social networking, new games offer customization options that put the player in the drivers seat, allowing more control and influence than ever before.

Williams does an outstanding job of exploring this evolution in his article *The Video Game Lightning Rod* (2003). The article describes Williams' content analysis of three news magazines' portrayals of video games between the years 1970 and 2000. The author demonstrates that portrayals actually go through "waves" of utopian and dystopian perspectives that seem to correspond to political and social circumstances.

Williams compares video game communication to previous media studies by referring to the work of Wartella and Reeves.

“... media coverage and subsequent research has followed a three-wave pattern. First, fears emerge out of concern that the new medium might be displacing a more ‘constructive’ activity, ironically often the use of a previously feared medium. The fears of health effects appear, followed by fears of social ills” (525).

Williams points out the influence of politics and society on widespread acceptance or rejection of media. His data show that during the Reagan administration’s push for a traditional family, many writers were airing concerns about video games as electronic babysitters; a medium which would displace other “more healthy” activities. The public was frequently offered numerous images of arcade junkies and gamer delinquents. However, as disposable family income increased in a prosperous period, video games became a more common form of entertainment and some went so far as to frame them as beneficial and revolutionary.

In short, Williams found that video games went through a process of vilification and at least partial redemption as their fan base aged and allowed a more mainstream acceptance of game play. Many of the fears that surrounded video games are typical of any new medium and the change in attitude occurred not because of any major opinion shift, but rather because of a natural evolution—the children who grew up with video games grew up and ran society.

If not entirely beneficial, video games are at the very least gaining widespread credence as a viable medium with potential for unique networking and social opportunities. This leads to a growing respect for video game studies as relevant, important, and useful from a scholarly perspective. Evidence for this acceptance can

be seen in the growing number of video game classes and programs among American colleges and universities (Schiesel 2005b, Mangan 2005).

Media studies in the communication field may help us to better understand the practices of video game critics and advocates as well as the progression of video game studies as a sub-field of communication research, however, they do not do as much to help us understand the strong gender divide in relation to video game perceptions. According to the communication perspective, men and women should adopt similar attitudes towards video games as time goes on. We've seen, however, that this is not the case and women have been much more hesitant than men to associate positive characteristics with video games. To better understand this contrast, we must look to gender studies and theories of gendered play.

#### The Gendered Play Perspective

Barrie Thorne's theory of "doing gender" (Thorne 1993) offers a great deal of insight into the issue of gendered gaming. She finds a number of things in the course of her research that may help us to understand why play is often gendered and how certain expectations for gender are enforced.

Thorne points out that socialization begins at a very young age. From the time a child is born it is placed in either a pink or blue blanket and given a gender-specific name to ensure that there is no ambiguity relating to its sex. Most parents tend to implicitly promote stereotypical gender play and activities (sports and trucks for boys and cooking and dolls for girls, for example) with their children. In this way, children become very sensitive to their own gender and the gender of others. They define themselves as "big boys and girls" and identify with those of the same sex while differentiating between themselves and those of the opposite sex. Gender is a clear

distinction to make, and differentiation is made easier when such typically gendered features as clothing, toys, hairstyle, and behavior are visible.

Thorne explains that generally, a child will come to identify more with the parent of the same sex. Gender is seen as a common bond and the child will try to emulate and cling to the same-sex parent while avoiding aspects of the opposite-sex parent's personality that are viewed as gender-typical. For example, a young boy may be eager to learn to help his father fix a car, but he may be less likely to help in the kitchen if this is a room typically dominated by his mother. This being the case, it is understandable why women would not see video games as a viable entertainment option—most children's mothers do *not* play video games.

Parents aren't the only driving force in terms of socialization, however. Peers become increasingly important as the child grows and begins to spend larger periods of time outside of the home. This fact may help us to understand why young girls who enjoy video games grow into young women who cannot tolerate them.

Although gender may be explored and even ignored to some extent when the child is alone or in small groups, when a child is introduced into a larger circle, same-sex self-categorization is largely inevitable. In American schools, it is typical for children to be segregated by age into classrooms of 20-30 male and female students. Thorne finds that this sort of environment is exactly the kind of setting in which gender can play a major role in socializing behavior.

Though children may cross gender lines when alone or in small or mixed-age groups, in larger, same-age groups, they tend to cling more to members of their own sex. Children seem to gravitate toward segregation either because it is the obvious choice (i.e., making up sports teams by pitting boys and against girls is a quick and easy way to set up a game) or because it is the safest choice (i.e., to avoid teasing,

“cooties”, or disruption from those with different play preferences). Maccoby (1990) confirms this preference for segregation:

“...behavioral differentiation of the sexes is minimal when children are observed or tested individually. Sex differences emerge primarily in social situations, and their nature varies with the gender composition of dyads and groups. Children find same-sex play partners more compatible, and they segregate themselves into same-sex groups, in which distinctive interaction styles emerge” (p. 513).

Thorne shows that as children age, gender becomes *more* important. Whereas a preschool child may have friends of either gender without fear of reprisal, a fourth grader is very likely to either refuse to socialize with members of the opposite sex or publicly deny any cross-gender socializing in which s/he partakes. As children enter adolescence, cross-gender socialization can become even more difficult as teasing turns into speculation and confusion about romantic ties. In short, it is “safer” to stay with one’s own gender.

The fact that developing individuals tend to be surrounded by other members of their own sex explains why gender socialization is so strong and consistent. Children learn from a young age what behaviors and activities are appropriate and the pressure to stay within gender boundaries is strong. Conformity and same-ness is appreciated; difference and dissent is not. This scenario makes it very difficult to make headway in bringing girls into a previously male-dominated realm (video game culture, in this case), but as we will see, it is not impossible.

In an effort to better understand gendered attitudes toward video game play, I conducted a pilot study for this thesis in the spring of 2005. During a two week period,

I asked my graduate colleagues who were serving as teaching assistants in undergraduate communication classes to hand out my surveys to any willing volunteer participants. The survey consisted of multiple choice and short answer, open-ended questions designed to learn about the subjects' video game habits, opinions, and experiences. Of the many packets handed out, 97 completed surveys were returned to my office. These were then coded and analyzed using the statistical analysis program SPSS. Originally, it was expected that the survey would show the following:

- Households with male children are more likely to have a video game console.
- Girls are less likely to name themselves as the primary owner of a household video game console.
- Females tend to play video games less as children and less in the present when compared to males.
- Males more frequently name sports games as their favorites while girls more frequently name puzzle games as their favorites.
- Males tend to like video games more than females.
- Females are more likely than males to play video games on devices other than consoles (cell phones, calculators, etc.)
- Individuals tend to keep their attitudes about gaming from childhood (eg; a child who likes video games “strongly” will probably “like” or “strongly like” games as an adult.)
- Girls are more likely to quit playing video games at some point.
- Females who play video games are more likely to have male relatives.
- Individuals who play games with others regularly are mostly playing with regular, male gamers.

- Boys are more likely to visit and enjoy arcades than girls.
- Males are more likely to own video game consoles as adults than females.
- Males will be more likely to have handheld gaming devices (not including cell phones, palm pilots, etc.)
- Adult females are more likely to play video games alone than with female friends.
- Parental attitudes towards video games correlate to individual attitudes towards video games.
- Females are less likely than males to see video games as a good use of time.

Although there was some support for gendered differences, there were far more female subjects than male subjects, which served to confound conclusions. However, the uneven ratio in the study allowed for a wide range of female responses, many of which came as a surprise after being immersed in the current literature and poked numerous holes in the preconceived notions discussed earlier. It did not appear that increased exposure to video games would necessarily lead to heightened appreciation of video games among women (in some cases, the opposite was found to be true), and the gender of siblings in the household did not immediately explain differences in gaming preferences.

The survey found that with the exception of sports games and some first person shooter games, many males and females enjoyed the same games. Furthermore, among those who no longer played video games, the same reasons were most often given regardless of gender (lack of time, broken equipment, out-dated games and no desire to buy newer ones, other interests, etc.). What was more interesting was the diversity of responses from women. Some responses were almost stereotypical in their assertions that videogames "...take boys away from their girlfriends" or that "I was a

girly girl growing up [so I didn't play many video games]." Others could have been confused with a stereotypically male response: "I played a ton of computer games when I was a child, [a] couple hours each day."

These findings and a lack of definitive explanations for them in the existing research encouraged a deeper look. Since female responses were so diverse, the subsequent research project for this thesis opted to focus entirely on women in order to better understand the complexity and nuances of a woman's experiences with video games. In so doing, the goal was to achieve a better understanding of women at play in a digital world. This choice would come to show me that there is a lot we have not considered about females and video games, and a lot we need to discuss before we can really tackle the data.

Chapter Two will explain the steps taken following the completion of the pilot study and attempt to justify the methods used in the main research project.

## CHAPTER 2: METHODS

I will attempt in this thesis to compare, not males and females, but female gamers and female non-gamers. How are they different? Were their upbringings consistently different? Were their peer groups different? Are the natural recreational inclinations of non-gamers in some way oppositional to video game activities? This information is the key to understanding the female gamer and the many more females who are not gamers.

In order to gain this knowledge, I conducted a series of in-depth interviews with women from all over the Cornell University campus. I believed that among the student body, a variety of opinions could be found. In order to diversify the subjects, I found women gamers by going to places where video games are generally seen as legitimate forms of play (i.e., a video game design class, the Cornell gamers society, and the Dance-Dance Revolution club). More “mainstream” women were needed for comparison, and I found these in an undergraduate oral communication class (COMM201), a required course for many students. I chose a few more students from the pilot study for their strong opinions against video games and their willingness to be interviewed again. Thus, I ensured that there were some vehement non-gamers in the subject pool in addition to gamers and various degrees of moderate gamers.

Although it would obviously be ideal to observe many women from different demographic groups over time, it was nonetheless very useful to choose college-aged subjects (ages 18-23) because this age group was born shortly after the advent of video games and so has matured in an environment in which video games have come to be fairly common and natural. These women have grown up in the video game era and are more familiar and comfortable with digital gaming than the previous generation, but they will be less likely to take video games for granted than some members of the current generation who have never known a time when video game production was not

a booming industry. The scope of this project could not allow anything as expansive as a long-term study of a randomly selected pool from the population at large. Still, this small, focused, image of the female-gaming experience allowed me to look at an especially interesting, but manageable group while still keeping in mind the bigger picture.

I chose a qualitative approach because in a young field such as this, there are few data of any kind, and one great fault of much of the existing research is a failure of some researchers to delve into their subject to the point of actually looking at games and gamers. It seems foolish to try to quantify gamer behaviors or game content before one is truly familiar with the range of behaviors and the games accessible. De Jean et al. (1999), for example, do a wonderful job of bringing certain gender behaviors to light. However, they tarnish their credibility when they remark on a video game which, had they played it, they would know did not contain the objectives or activities that they listed.

It is important in these early stages to obtain the most thorough and solid data possible. Though collecting such data may lead to a deluge of information that seems nonsensical initially, over time it may be whittled down, categorized, and analyzed, but only if the foundational knowledge is rigorously collected. My individual efforts will certainly not be enough to overcome the shortcomings of the entire field, but when combined with the work of many others, they may serve as a small piece of the foundation upon which the future of the field will be built.

I aimed to learn about the subjects' early experience with video games, their home lives, their male and female peers, their perceptions of games, their perceptions of the opinions of others regarding games and gender roles, and their gaming habits in the past and in the present. Although each interview was unique based on individual

differences among subjects, the following list was brought into every meeting and each woman heard some minor variation of these questions:

**Some general questions:**

What is/are your major(s)?

Do you have a job? What is it?

Do you participate in any extracurricular activities? What are your hobbies?

**Video Games and You**

How would you define “play?” “Games?” “Video games?”

How often do you play video games? What would make you play more/less?

What do you like/dislike about video games?

How good a use of your time are video games?

What are some possible costs and benefits of video game play?

**Video Games and Gender**

Males tend to play video games more than females. Why do you think this is?

**All about You**

How do you play/relax?

How do you kill time when you just have a short period free?

What do you and your friends do when you are together?

How many hours a day are you surfing the net (shopping, blogging, etc.)?

How many hours a day are you on the computer playing games?

Did your family have a computer when you were young? When did you get it?

Do you own a game console?

Did you own a console as a child? At what age? How did you get it?

As a child, how did you feel about video games?

Who introduced you to video games? Who (if anyone) did you play with?

If you stopped playing, what was the reason?

The general questions were aimed at learning about the girls' personalities—their interests, activities, and skills. The "Video Games and You" questions were meant to get the girls talking about video games and get at their candid feelings on the subject. The "Video Games and Gender" question was meant to start a dialogue to get both the interviewer and interviewee thinking about what it means to be female, what it means to be a gamer, and what roles society and personality play in the female-game relationship.

In the "All About You" section, the women were asked various questions about their past and were pushed to consider ways that past exposure/lack of exposure to video game technology may or may not have affected their present habits and opinions. This portion also worked toward the goal of learning how young women perceive play, how they play, and how they may or may not use technology to mediate or initiate play. This section had the added benefit of drawing out differences between childhood and adult attitudes towards play where they existed and delving into issues of social play which existing research indicates is very important to females of all ages.

The interviews generally lasted 45 minutes. The shortest was 25 minutes and the longest was well over an hour. Most subjects seemed very interested in the topic and were eager to discuss video games. It should be noted that it was not difficult to find subjects for the study due to the nature of the subject search. As one might expect, women in the video game club and video game design class were enthusiastic about

the subject and eager to discuss. Similarly, women in the communication classes were already somewhat familiar with the controversies and issues surrounding video games and were eager to discuss what they knew and learn more about this field of research. In a few cases, communication students were offered extra credit for participating in any departmental research study which helped increase recruitment, though occasionally this meant a rather sullen student with little patience for the interview.

Generally speaking however, most of the women were very interested in this new medium either for its entertainment values or its societal implications and it was not at all difficult to find volunteers to come to my office and talk for a while. It also helped that I made scheduling as flexible as possible and allowed the women to set the date and time of their interview to ensure a convenient, unhurried scenario. Because there was no deception (only open dialogue) and no major incentives or impositions, it was a very straight forward process to obtain permission from the Human Subjects Committee for my project and it was a very pleasant endeavor to find study participants. Furthermore, I assured all of the subjects that their identities and answers would remain confidential in order to ensure honest opinions and comfortable discussions.

Each interview was recorded onto audiocassettes and accompanied by the interviewer's notes. The recordings were later transcribed and examined carefully. In order to better understand the information, I used a color-coding system on a hard copy of the interview transcripts. Pink highlights were used for details relating to personality such as hobbies, interests, etc. Orange highlights indicated information relating to access and habits such as the number of times each week an interviewee played video games or the play where she typically played video games (i.e., at home, at a friend's apartment, etc.). Green highlights were used to signify each woman's likes, dislikes, and feelings. This could include specific video game elements the

subject preferred, or the subject's opinions on video games as a waste of time or a good social tool. Blue highlighting was used on portions discussing general play issues and definitions such as the question "How do you define play/game/video game?" or discussions about whether or not computer solitaire was the same as playing card solitaire. Finally, yellow highlights were intended to draw the researcher's attention to interesting quotes or ideas that seemed to warrant further scrutiny for one reason or another. Often these were subjects' strongly worded thoughts on video games or the subjects' musings about play, video games, and gender.

Throughout the transcripts, my thoughts and questions were written in the margins. Possible connections, trends, and theories were considered while reading. Personality (pink) details were linked to habits (orange) in an attempt to generalize about the type of girl who is likely to be a gamer. Access (orange) details were compared to feelings and opinions (green) to see if there is a tie between exposure to video games and feelings about video games. Personality (pink) and musings about play (blue) were also compared with the hope of finding perceptual differences between gamers and nongamers.

One of the most difficult parts of the study involved labeling the subjects of the interviews. Some of the women felt very strongly that video game effects were very negative and dangerous. Others enthusiastically defended video games against common criticisms and were quick to offer redeeming qualities. As one might expect, there were also a number of women who were somewhere between those extremes. In order to compare gamers and non-gamers, each woman had to be labeled based upon her opinions, habits, and beliefs. This task was not easy as many women who called themselves non-gamers actually played a great deal more than the average subject. There was also the problem of determining what constituted gaming. The interviewees

were asked questions about everything from MMORPG, CD ROM games and console games to cell phone games, online puzzles, and the “accessories” folder on most computers which includes such classics as solitaire, free cell, mine sweeper, hearts and even poker.

When the question came up in interviews as to what was to be considered a video game, I was careful to tell the subjects that “it’s whatever it means to you” in order to allow free thinking without researcher influence. In truth, most researchers — and even gamers—cannot agree about a definition of video games. Some only consider console games, while others include computer and arcade games. It seemed best to allow the women to express themselves by defining games on their own terms and discussing what games meant to them. Some interesting discussions resulted, but it made comparisons even more difficult. Should a woman be called a gamer if she did not call herself one? Such labeling actually proved necessary because every single woman out of the twenty-five total subjects had a reason why she wasn’t a “true gamer.” Surely a woman who spends 4-5 hours a day on a Nintendo system is to be considered a gamer. After all, a woman who spends 4-5 hours a day practicing guitar is safely called a musician, is she not? With this thought in mind, I opted to call some of the women gamers even though they had avoided that term.

This lack of women who self-identified as gamers made me think harder about the way the field defines “gamer” and “video game”. The interview subjects had no concrete definitions and I found that I was at a loss to provide any sort of unifying concept. Ultimately, this haziness allowed the women to express themselves on and in their own terms, but as a field, surely it is difficult to know that we are effectively combining our efforts if we cannot agree on the most basic terminology of our conversation. As we will discuss later, it may well be worth the effort to rethink our

preconceived notions of “gamers” and in the case of gender studies, perhaps throw out the term “gamer” entirely as most females avoid it, thereby rendering it useless.

Even more complicated was the type of games being played. Some women claimed to hate video games, but they would play computer solitaire almost every day. Among the interviewees (and I get the impression this is true among many professional gamers and scholars as well) some would define computer solitaire as a video game while others would not. Finally, I decided that any form of digitalized game played on a regular basis each week or for extended periods of more than an hour on a somewhat less regular basis would denote a gamer. This criterion was chosen because for the purposes of this study, it was important to know how much a part of life video games are to a woman. Several hours a week, or several days at a time during school vacations seems to indicate that games are a priority for an individual and this priority status seems to be enough to place a gamer female apart from the non-gamer female mainstream. Some may argue that this was an arbitrary decision, and in large part, it was. However, it was broad enough to allow for female gamers and narrow enough to provide some solid foundation for labeling the subjects, so functionally, it was a good choice. It does, however, force us to question our use of the term “game” as well as “gamer” if we intend to continue video game/gender studies.

Non-gamers were much easier to identify than gamers. There were a few women who would play no computer games, had no access to consoles whatever, and did not play cell phone or online games of any kind. This extreme wasn't terribly common, but it was definitely present. Most women interviewed could be located between the extremes of avid gamer and non-gamer. These women were labeled with

various degrees of “moderate gamer” from low-moderate gamer to high-moderate gamer.

A low-moderate gamer would be a woman who occasionally played computer solitaire, had access to console games and played once a month but only because everyone else was playing, or perhaps liked video games as a child but now couldn't find the time for them even though she might like to. A high-moderate gamer might be someone who didn't have access to video games on campus but who kept a video game console at her permanent residence and played somewhat regularly during school breaks. (The difference between this individual and a gamer would be the amount of time spent on the game system and the opinion of the game system. For example, a woman who looked forward to playing video games and would do so for 3-4 hours a day while on break might be a gamer, but a woman who didn't care about games but was happy to play them for a few hours in order to bond with a younger sibling who loved them would be a high-moderate gamer.)

The title “moderate gamer” was avoided as much as possible for being too ambiguous to be helpful. Most women fell slightly away from center in their video game opinions and habits and it was important to acknowledge these leanings when coding. A depiction of the labeling results can be seen in the table on the following page.

Table 1 Breakdown of Subjects by Gaming Level

<u>Category</u>	<u>Number</u>	<u>Percentage</u>
Non-gamers	7	28%
Low Moderate Gamers	5	20%
Moderate Gamers	2	8%
High Moderate Gamers	6	24%
Gamers	5	20%
<hr/>		
<b>TOTAL</b>	<b>25</b>	<b>100%</b>

Out of the twenty-five women interviewed, thirteen fell into the middle of the spectrum with five low-moderate gamers, 2 moderate gamers, and 6 high-moderate gamers. At the two extremes, non-gamers made up seven of the twenty-five total interviews and gamers comprised five of the total subjects. For the sake of testing the label schema, I tried relabeling the interviews, changing some of the labels for interviews that had troubled me initially (“Should this be a non-gamer or a low-moderate gamer?”), but the results were much the same with a fairly large number of non-gamers, a larger number of low-moderate, moderate, and high-moderate gamers and a group of gamers only slightly smaller than the rest. It is possible that a second coder would contribute greatly to coding consistency, but it was important to me at the very least, to ensure that I was individually consistent in my coding efforts.

Worth discussing, is the gaming spectrum itself. Once again, for the sake of utility, I had to come up with something that would allow a comparison of the interview subjects, but had no ruler in my literature toolbox. As nothing is black and white, it seems necessary to go farther than thinking about males vs. females, and even

gamers vs. non-gamers. This study taught me that there are indeed, many *degrees* of gamer, and very few people actually seem to exist at the extreme ends of the spectrum. Future scholars would greatly profit if they took the time to develop a coding schema and a truly inclusive, comprehensive measurement for gamer activity. This would, of course, require firmer definitions of games and gamers (if we opt to keep those terms at all), but the discussion would certainly be a rich and rewarding one for all its inherent complexities and hardships.

### CHAPTER 3: DATA

Speaking to women with different backgrounds and experiences was fascinating. The conversations recorded in the transcripts were lively, informative, and unique. Every woman interviewed had something to say about video games—sometimes more than she realized. In speaking about her own preferences, habits, and beliefs, each subject opened up about herself and occasionally let slip a tiny indicator of something deeper in the form of a choice of words, a turn of phrase, a nervous giggle, or an exasperated shrug of the shoulders accompanied by a roll of the eyes. I was very gratified to note that not only did I not have to probe very much to encourage women to speak and think deeply about the subject (many had had reason either as media scholars, game players, or “game widows” to consider the implications of gaming prior to our meeting), but many of them offered up amazingly decisive and poignant remarks which not only challenged those who would disagree, but would challenge me as well.

I gave very little information at the beginning of the interview as to my intentions, leaving the women to decide how I felt about video games. I hope that because of my attempts to remain completely even and neutral, they did not feel any pressure to answer one way or another. Many of them seemed to assume that I was either trying to find support for anti-game theories, or else prove to the world that video games are a great form of recreation, but there was no indication that there was any trend in these conclusions based upon the women’s status on the gamer spectrum. Some women (both gamers and non-gamers) were somewhat confrontational and seemed to feel a need to defend their beliefs while others (again, both gamers and non-gamers) were very enthusiastic and positive; seemingly assuming that we were in total agreement at all times. At least some degree of success is evident in the opinions expressed. Without prompting, many women provided me with powerful arguments

both for and against video game play. They cited articles they had read, they described their own experiences and their observations of other people, and they confidently explained why they felt the way they felt. It would surprise some to note that some of the most interesting quotes within the interviews came in the middle of tangents and musings that came without any prompting on my part. From the data, I learned many things.

### Issues of Access

Among the greatest surprises was the realization that one of the expected outcomes never came to pass. I initially predicted that women with early exposure to video games, computer games, and the like would be more likely to appreciate and enjoy such things as young adults. There was little or no evidence to support this prediction. Several women whom I labeled as a gamer had only the most minimal exposure to video games as children. One only came to enjoy video games as a college student. Other women admitted that they loved video games as children but refused to play as adults.

In hindsight, this should not have been so surprising. The women interviewed, the game industry, and the marketing we can now see (pink Nintendo DS systems, game commercials featuring young girls, etc.) all indicate that at least younger females in the last decade or so have had equal numbers of opportunities to play video games

and computer games. Further evidence of this can be found in a keynote address to the Kaiser Foundation in 2003. In this speech, it was announced:

“A nationally representative random-digit-dial telephone survey of more than a thousand parents of children ages six months to six years old [found]... that children today are growing up absolutely immersed in electronic media even at the very youngest ages... Half of them have used computers, and that includes a third of all the kids zero to three and by the time they’re a little bit older, seventy percent have already used computers. Fewer children this young have played video games, although you can see that by the time they’re in that four to six age group, about half of them have played video games. Using these different screen media accounts for on average about two hours a day each and every day among all children from six months to six years old.... many children six and under are active computer users. Nearly three out of four kids now in this age group, which is six and under, have a computer at home, and 63 percent of them have internet access at home... Each and every day their parents say they use a computer.... It’s not as frequent as TV or videos, but it’s certainly not a rarity or an occasional thing either... it’s not a particularly brief activity either” (Rideout, Wartella, & Vandewater 2003).

Looking at gender, we can see that the gender gap—though it is quite large among adults—is very small among children at present. Calvert, et al. (2005) found that:

“...computer use patterns are now similar for girls and boys. Similarly, data collected in the census of 2000 reveal that there are no longer gender differences in children’s use of computers at home for the 3-17 year-old age group... A gender divide favoring boys over girls was not found in our data. Boys and girls began to use the computer at about the same point in development, and they had similar skills in diverse areas ranging from turning on the computer to asking to go to specific Web sites... Contrary to past research, we did not find that boys were more likely to have

played games on the target day than girls (Subramanyam et al. 1999), suggesting that the content of games may now be more favorable to girls, at least for computer games directed at very young children. These findings further support the premise that gender patterns in computer interactions favoring older boys over older girls are learned...” (Calvert, Rideout, Woolard, Barr, & Strouse 2005).

Though childhood certainly may play a role in adult views of video games, the equation in question is clearly not as simple as early exposure = future interest and a lack of early exposure = future disinterest. If this were the case, then we would have many more women gamers.

The interviews confirmed this complexity. Most women involved stated that they had some access to games as children either in the form of learning games at school (Oregon Trail, Where in the World is Carmen Sandiego, etc.) or recreational and learning games at home. Many had video game consoles and, though these were often used more by males in the household than by females, they were available to, and enjoyed by, the young girls. This information raises the question again of what happens between childhood and adulthood to determine whether or not a woman will be a gamer? Going deeper into the transcripts, interesting things can be seen which may shed some light on the answer to this question.

### Recreational Choices

Many reasons were given for playing or not playing video games. Fun/not fun, social/anti-social, engaging/boring, thought-provoking/mindless, appropriately-challenging/too difficult, activity/inactivity are just a few of the dichotomous reasons provided by the women interviewed. While it is to be expected that different people

would have different definitions of a fun activity, it is very interesting to see how different women explained their positive and negative outlooks on video games.

In many cases, the same reason was given for different points of view. For example, one female non-gamer preferred television to video games because TV has “a plot, you get excited, you get into it, you know, [it’s] something you look forward to, it’s an escape from reality” while a gamer stated a preference for video games because “it’s a very rich fantasy world...I like games with [a] story.” Likewise, many gamers presented gaming as primarily a social activity—they played with friends at get-togethers, they used online games as a way to connect with friends in far away places, and they learned about new games from gamer friends. Non-gamers, however, saw games as primarily anti-social—something that people sit in front of, ignoring the rest of the “real” world around them. “Even though movies, you’re not talking or anything I guess it’s kind of more of a social thing than if you’re just sitting in your room playing some game.” This perception was very well-known among gamers and they occasionally challenged it in the form of assurances that “whenever I play an online game, I usually end up playing with friends...we all always end up playing together” or “I guess it’s kind of like, associated with like, dorkiness and like, not having friends if you’re sitting around and playing video games but whatever! I don’t agree with that!” A common sentiment was “I try to limit it. I *swear!*”

One thing that gamers and non-gamers *could* agree on was that video games are best in moderation. Both gamers and non-gamers felt that video games could be addictive or could be used as procrastination tools, but among gamers, this possibility was not enough of a concern to stop playing entirely. They simply monitored their time and kept their gaming in balance with the rest of their activities and obligations. In some cases this meant no video games until after homework was finished, or perhaps limiting play to three hours or less a day. A few gamers refused to play while

in school; instead they waited until they were home on vacation to play their favorite games.

### Parental Example

It was interesting to talk to some of these women and learn that although their parents might have been supportive of educational gaming, very few women had ever seen their mothers play video games, either alone, or with the women and/or their siblings. The only exceptions were a few mothers who played solitaire, scrabble, or other puzzle games online or through the accessories folder on their computers. In several cases, women and/or their siblings played video games on a console or computer with their fathers (or uncle in one case) when they were very young but could never recall playing with their mothers. Mothers also were less likely to be supportive of video games when compared to fathers. This may indicate that most women grow up never having seen an adult female play video games. Such an environmental factor may be a major force in socializing girls to the notion that women don't play video games.

### Peer Influence

Peer interactions may further socialize women to avoid video games. One gamer admitted “when I’m with my [non-gaming] friends I kind of push my video game background to the—to a minimum so it doesn’t interfere with anything.” Here we see that there is pressure to avoid the label “girl gamer.” Gamers and non-gamers are well aware that girls who play video games are not the norm. One gamer admitted to being the town “oddball” as a way of explaining why she liked video games from a

young age. Several women stated that they usually played video games with male friends or boyfriends rather than close female friends and a couple suggested that their “tom boy” habits growing up might explain their love of video games. These women seemed to feel that because they get along well with males and can understand the male point of view especially well, they are more able than their female peers to appreciate video games.

The women indicated that their most common activities with close friends were usually talking (either on the phone, or in person), “going out” (to parties, bars, or restaurants), or watching movies or favorite television shows together. The things they liked about these activities (unwinding, getting away from work, building social bonds) were generally not benefits associated with video games. Though a few individuals felt that video games *could* be social, most women (especially low-moderate gamers and non-gamers) felt that it was unlikely that they would ever use them to socialize with friends.

### Girls and Gamers

It actually seems “normal” for women to denounce games. Though video games may be seen as being acceptable in moderation, fine for children if the content is not violent, and grudgingly accepted as the toys of choice of boyfriends, brothers, and male peers; generally speaking, video game culture is alien territory for most women.

One non-gamer referred to video game controllers as “remote controls” indicating a lack of familiarity with basic game terminology. Another non-gamer used news stories and studies of video game violence to supplement her knowledge of

video games. She had no experience herself and so she frequently fell back on “I’ve heard of” and “they say that” to answer the questions posed. While this lack of experience and exposure is perhaps unsurprising in light of what we already know about females and games, it is very surprising that in a time when many other areas in which gender gaps have existed are being challenged, women often seem to accept or define video games as a male zone.

Most women admitted that they were used to being beaten by males at most every game they played. Some stated this as a reason for quitting at a young age—they got tired of losing to the computer and tired of being beaten by male friends. Female gamers even seem to place themselves in an inferior position among other gamers:

Interviewer: “Do you ever beat guys at DDR?”

Girl Gamer: “Yes, I always beat them at DDR... it makes me feel good that I can beat them at something but it’s ‘cause I played DDR a lot when I was younger so I don’t know whether that’s a valid reason. I’m sure if they had played DDR for as long as I have...they would probably be better than me or as good as me.”

Here we see the gamer putting herself down by assuming an unfair advantage on her part has given her the edge in her favorite game. She cannot seem to accept that she may be a better dancer or game-player than her friends and instead, points to their higher skill in most other games. A high-moderate gamer stated “I wouldn’t expect myself to [play as well as my boyfriend] so I just knew I’d never be able to beat him.” It’s not just about skills either. There’s also the matter of gamer culture.

Even women that I coded as gamers were hesitant to call themselves gamers. They expressed concern that they were not privy to the in-jokes, language, and industry knowledge that characterized “true” gamers. One young woman who was

designing a video game for a game design class and had extensive experience with many types of games insisted that even after many years of studying and playing video games, “it’s kind of hard to like, get into, like... it’s kind of like cultural, you know? Like, when I’m... with my game design group... I’ll sit there and ... I’ll like, have no idea what they’re talking about because it’s just like one big inside joke. They like, make references to all these like, weird things... it’s like they’re talking a different language.” When asked if she felt strange playing video games with males, she answered, “Yeah. I don’t mind though...I don’t really get what they’re talking about but... it’s fun anyway.”

Meanwhile, a low-moderate gamer described an evening in which she attended a party. At the party, several males were playing video games and she said “[I] didn’t... feel the need or desire to join in and it wasn’t like they were asking me to join in, they were like, pretty much into it... even if I had wanted to I probably wouldn’t have felt comfortable being like ‘can I join?’ but I really didn’t think much about it.”

### Game Content

Most women—gamers *and* non-gamers—agreed that more complex games were not desirable. While gamers were more likely to enjoy complicated plotlines and intricate quests, even they preferred a game which didn’t require a great deal of time in order to understand game controllers, 3D world physics, and spatial manipulation (this tendency coincides with Lucas and Sherry’s observations of gender and play in 2004). The women generally believed that an ideal game would allow one to just jump in and begin playing and exploring.

Additionally, as previous research has indicated, the women interviewed generally preferred non-violent, non-sport games. Gamers were more likely to enjoy a wider range of games, but they generally professed to preferring “happy” games with

bright graphics, positive motives (defending a kingdom rather than offensively attacking others), and a wide array of skill-types including fighting, strategizing, puzzle-solving, and collecting.

Although some women cited game content as a reason for the gender gap in gaming, most women who were pressed admitted that even if content were altered, they would still not play video games. Most non-gamers and low-moderate gamers could not even think of games that they themselves could enjoy. Instead, they suggested feminine themes that might attract *other* types of women. One woman went so far as to predict that any game made for women would inherently be pathetic. She joked that it would probably involve shopping or some other similarly stereotypical feminine activity and assured me that there was no way she would play something like that. She—and a few other women I interviewed—could not even fathom a game creation that could ever hold her interest.

An interesting exception to this trend came in the form of a couple of women who suggested educational games for adults. One imagined a game that would evaluate her digital art and serve as a tutor—informing her if something was asymmetrical or coaching her to improve the quality of her creations. She became very enthusiastic thinking about this “game” and stated that she would buy it if it existed. The other young woman suggested a game that would mimic a business scenario. It would be something that would help her learn to buy supplies, invest capital, and advertise successfully in order to make a small business prosper.

What both of these exceptions have in common is a tendency to think of computing hardware as primarily a tool rather than a toy. Both of these women turned their games into something pragmatic and educational for their real-life areas of interest—graphic design and business. Similarly, many other gamers counter-argued

against the popular non-gamer complaints (games are anti-social, replace physical activity, and do nothing to advance learning or relaxation) with assertions that gaming taught them something valuable (one gamer was interested in joining the video game industry and used her play as research), gave them a creative outlet (the gamer who wrote stories about her online game avatar based on her adventures in a role-playing game), allowed an opportunity for exercise (dancing games such as Dance Dance Revolution), and opened up lines of communication to allow social bonding among friends and siblings (MMORPGs played by friends many miles apart, game nights in which several friends or relatives would get together to play, the social interaction that occurs when friends tease one another during play and compete in a friendly way, etc.).

## CHAPTER 4: CONCLUSIONS

It seems clear from the data and the work of previous researchers that although gaming technology is available to women, it is not perceived by most women as a feminine past-time. Many concerns heard from an earlier generation of television critics were voiced by interviewees (It's too violent, it discourages creativity and physical activity, it is not educational, etc.). There also were many implicit statements that video games are childish and male-dominated.

A non-gamer put the situation in an interesting way when she said:

“Maybe because we're more like, stereotypically like, girly and feminine, but like, there are other things we like to do [instead of playing video games].” The same non-gamer later stated:

“Our town's like, very social and like, all my brother's friends have always been close so they'll come together and [video games] sometimes but like, they'll go out with the girls and like, hang out with them and go to the movies and do stuff like that which kind of took them away from sitting at home playing video games... With my brother and his friends like, they'll do it like, in a social atmosphere it's like, the boys are just like, hanging out 'cause they're still younger, they're just becoming teenagers now.”

Here, video games are associated with antisocial tendencies while “going out” is naturally associated with females as well as more mature males. It is implied that a “normal” adolescent boy is one who would rather go out with girls than stay home and play video games with his friends. This assumption may point to an implicit belief that

video games are socially unhealthy or indicative of inherent social shortcomings. Such a belief would seem to support Funk and Buchman's (1994) assertion that it is girls who do not feel accepted who are more likely to play video games. If girls are expected to be social and video games are seen as anti-social, it seems only natural that girls who enjoy video games would be labeled as atypical—a label that surely wouldn't escape their own notice. Meanwhile, girls who fit in with their peers would be pressured to give up video games as they matured, making it less likely to find a popular, self-confident girl gamer.

Not only do peers play a role, but perhaps parents do as well. As was mentioned earlier, although some fathers were reported as playing video games, it was extremely difficult to find a subject who reported her mother as having positive feelings toward video games, let alone playing any herself. This lack of maternal presence in gaming culture may help to explain how girls are socialized to see video games as male-dominated. It may also at least partially explain why most women do not perceive video games to be an appropriate recreational sphere for mature adult women—they have grown up without ever seeing an adult female play.

Female gamers are very aware of the stigma attached to game play—especially for females. They are quick to defend their activities, they are ready with support for their recreational choices, and they are very sensitive to the way non-gamers and male gamers perceive, or seem to perceive them.

Surprisingly, if we open up our definition of video games, there are actually very few women who play no games at all. Even low-moderate gamers generally pause to play a little computer solitaire while writing papers. If we replace video games with “video play” we capture the rest of the “non-gamers.” That is, if we consider chatting on AOL Instant Messenger (AIM), using The Facebook to browse

through acquaintances and their photos, or shopping online to be a form of play or recreation that is executed in a digital environment, then all women interviewed are digital players, and perhaps even gamers in some way.

What we learn from this broadening of definitions is that the women interviewed are not afraid of computers—they quite appreciate them as a tool for communication, commerce, and creative endeavors such as web page design, digital photography, graphic design, and writing/publishing. These women are also not against using computers for recreational purposes such as shopping, chatting, and playing music. The problem with video games as we generally know them seems to come from perceptions of games as juvenile, purposeless, time-wasters that eat up money and social opportunities.

It is possible that over time, the stereotypes and negative associations attached to video games will subside—just as the concerns over television eventually lost their edge as it became a mainstream medium (Williams 2003). Perhaps video games will move into the feminine sphere and overcome gender stereotypes the way professional athletics have done. In order to speed this process along, industry, educational institutions, and parents would be well-advised to look to history and scholarly theory of gender and video games for guidance, while thinking harder about what it means to play and what it means to be a gamer.

## CHAPTER 5: APPLICATION AND THEORY-BUILDING

### Gendered Gaming: More Research

Jenson and de Castell conducted a research study of females and games (2005) and their results mirror mine in many ways. Many of the subjects could not correctly name the video games they had played—either forgetting titles entirely, or mislabeling games. Typically, the girls (ages 12-13) and women (ages 22-23) interviewed played card games, puzzle games, “gender appropriate” games and board games either online or on their computers through the accessories folder. Note: these games are often not considered video games by many scholars, gamers, and game designers. The women mostly played these games alone. When they played games with males, they were generally “gender-inappropriate games” such as first-person shooters and other violence-based games. Jenson and de Castell suggest that females will most frequently cross gender boundaries in gaming when the activity “is legitimated by male relations” (p. 7). This suggestion goes along with my findings that women gamers tended to play frequently with male friends and were more likely than non-gamers or moderate gamers to play games like Halo, Counterstrike, or EverQuest (games that Jenson and de Castell, along with most other game researchers, would call “gender-inappropriate” for the traditional female at play.)

Perhaps more interesting is the fact that Jenson and de Castell found something odd that I came across many times—a refusal by women to place themselves in the video game sphere or culture. Without any prodding from me, many of the women used the term “gamer” and they consistently used it in the negative—they did not consider themselves gamers, they did not want to be gamers, or they did not understand gamers. It was evident that most saw gaming as a culture to which they did

not belong. They did not understand the inside jokes, they did not know the tricks/skills/vocabulary, and they did not know the industry secrets and current events. All women interviewed—regardless of their individual places on the gamer spectrum—felt inadequate as gamers to some degree.

“Throughout our interviews, girls and women characterized their own game play as being inadequate and/or less competitive for reasons which make little or no sense in relation to their own lives and experience. One young woman claims that she doesn’t play video games anymore because the controls “got too complicated,” another claims that her “fingers are too stubby” to work the controls properly to navigate RPG games, and yet another, herself an athlete in a sport requiring exceptional hand-eye coordination, claims that she lacks the hand-eye coordination required for competitive game play” (pp. 4-5).

Based on earlier research showing similar tendencies of women to avoid “male” activities, Jenson and de Castell developed a theory of “magical realism” which proposes that:

“when girls and women see themselves as competing directly with their masculine counter-parts they tend to side-step the possibility of such gender-inappropriate engagement by discounting themselves as equal-opportunity competitors” (p. 5)

The women I spoke to insisted that they were not true gamers, that they got motion-sick looking at 3-D spaces on a screen, that the new console controllers were too complex for them to handle, etc. Even the women I labeled as gamers were

hesitant to call themselves gamers. There was a clear feeling of discomfort with the term in general, all across the spectrum. It was associated with males, with “others”, but never with the self. It was evident that gaming was viewed as a culture to which the interviewees would not or could not belong.

Jenson and de Castell also noted that most of the adult females they interviewed ceased to play video games around age fourteen. This information coincides with my data—many of the women I interviewed said that they discontinued video game play around the time they started high school. High school is a time when Thorne has found gender to be especially powerful. The urge to cling to same-sex friends is stronger than ever before, and largely safer than the alternative. Under these circumstances, a young women gamer would be hard pressed to find fellow gamers and perhaps even hard-pressed to find understanding of her gaming activities.

Among the women that I interviewed some claimed that in high school, time became the issue, while others insisted that they came to find other activities more rewarding. Still others stated that with greater independence (being able to drive and go out with friends) that age brought, they no longer felt a need to “escape” into video games for adventure and social opportunities—they had “the real world.” This practice may or may not be an example of magical realism—finding excuses to avoid a male-dominated challenge, but it is a possibility worth considering. It seems very likely from the women’s rhetoric and the gender research available that there is a common mindset among females that gamers are male, gamer culture is no place for females, and video games are not rewarding for females. This mindset would be a clear impediment to those who are advocating video game play for females, and it would give us a good reason to turn away from research based on assumptions of access or content. Those elements matter very little if society or socialization is training females

to hold a bias against all games. Further evidence for a problem of female mindset can be seen in the way that Jenson and de Castell's subjects categorized their game play.

“Many are reporting that, unlike boys who play “for fun,” girls who continue to play beyond adolescence aren't really, by their own accounts, “playing” at all, they are “de-stressing,” relaxing, or passing the time when they are bored—which is surely a very different, and significantly different thing from our invisibly but deeply gendered conceptions of “play.” Equally significantly, the games girls report playing or having played are those bundled with the consoles they purchased (e.g., “Duck Hunt”), or else, like Tetris and Solitaire, those readily available free of charge online. Economics intersects here in all-too-familiar ways with gender, and we see that where women *do* purchase games, they do so for their sons, their brothers or their boyfriends. Their rights to and control over their own leisure time are slight relative to their male counterparts, whether men or boys” (pp. 5-6).

Within the gender literature, there is strong evidence that the female mind tends to associate games with males and play with children. It is difficult for women to allow themselves the label or the activity of an individual at play, or a “gamer”. Many of the women I spoke to explained their game play as “a procrastination tool,” a symptom of multi-tasking (alternating between a game of solitaire and an essay in-progress, for example), a way to unwind or escape. However, it was only the gamer minority that tended to call video games “play” and acknowledge video games as a legitimate sphere of recreation. When non-gamers and low-moderate gamers were asked to define “play,” their answers usually involved “activity” and “imagination”—two words that were not always involved when the same subjects were asked to define

“video game.” These women felt guilty for playing games because they required time and occasionally money. The same guilt did *not* apply to such activities as going out to eat or going shopping with friends —the justification being that these activities promoted social bonds and healthy living through friendship and activity. Though “going out” was commonly listed as a favorite way to relax and have fun, it was not always associated with play, which was labeled as a more juvenile concept by some.

The idea of women feeling guilt over personal indulgence is further explored by Janice A. Radway in her book *Reading the Romance* (1991). Radway explores the subject of romance novels and the people who write and read them. She finds some interesting trends in her interviews with women who regularly purchase and enjoy romance novels. One of these trends is guilt. The women who read romance novels feel quite guilty for the time and money they spend on their entertainment. They acknowledge that reading these stories distracts them from housework, family, and friends and although they feel good after reading these books, they have trouble stating exactly why that is.

Much like the women I interviewed who enjoyed video games and played them regularly, Radway’s subjects felt a need to justify their activities.

“...one of their most effective strategies for justification involves the equation of romance reading with other forms of escape, especially participation in and attendance at sports events, which are activities enjoyed by most of their husbands... they are not comfortable with [this] defiance. They confess that they sometimes hide their books and usually acquiesce to their spouses’ wishes if they specifically demand their complete attention. Romance reading, then, is an acceptable way of securing

emotional sustenance... *only* if the activity can be accomplished without mounting a fundamental challenge to the previous balance of power in the marriage relationship” (p. 103).

Similarly, the gamers with whom I spoke felt a strong need to explain their habits. They insisted that they were “not addicted,” that they only played after their work was finished, and that they didn’t play alone as much as they played with friends. One woman who was a prominent member of the Cornell DDR Club seemed to personify Radway’s romance reader when she said:

“I personally think that people need to escape a little bit, I mean, if you get stuck down in this life...it’s really easy to get burned out and ... if you waste a little time playing a video game, I don’t really think it’s that much of a waste. I think you know, you’ve just done something for yourself. It’s like going out and getting a spa treatment I guess, like, I don’t see any point in getting your finger nails done when you’re just going to you know, like, chip ‘em up or whatever later so like, if you ask me, that’s a waste of time, but you know what, for those women who do that, they enjoy it. You know, it’s something they do for themselves and this is just what I do for myself... I play video games. I escape into these other worlds and I have fun.”

We see here that rather than justifying her actions by comparing them to those of a spouse who didn’t understand, this young woman justified her game play time by comparing it to the habits and preferences of other women her age who most likely would not comprehend the attraction of video games. As we have seen from Thorne’s research, peers are a very important part of social development and gendered self-

concept. Perhaps the dearth of girl gamers can be explained by peer pressure related to gender expectations equating video games with males. As a female grows and matures, she is surrounded more and more by same-sex friends and peers. This takes her farther and farther away from males and their play, and increases the pressure to conform to a stereotypically feminine mindset that play is juvenile and irresponsible.

If a female is unable to justify video games as either socially worthwhile or acceptably and responsibly escapist, then she will be unable to negotiate her interest in game play with the pressure placed upon her by stereotypical feminine expectations to avoid play for play's sake after childhood. Failing this, she will most likely either hide her activities (like the woman who admitted to pushing her gaming "to the background" while in the presence of female friends) or minimize them, possibly to the point of giving them up entirely. Only occasionally, will women find reasons to rationalize their game play, and these members of the minority (such as the woman quoted above) generally seem more comfortable with the overlying concepts of play and escape. It is important to understand female views of play, both so that we can comprehend the subtle nuances of gender and so that we can ensure that one half of the human population is not being cheated out of its right to play by pressure to be full-time, "maturity martyrs" without any opportunity for free play.

Women need not be a lost cause, however, to the gaming world. As Williams (2003) pointed out, all new media go through patterns of fear and loathing before they are accepted or praised. He found that for quite some time, mainstream media portrayed video games as a purely solo/child-centric pursuit. We now see that this is not the case. Currently, it is very common for adults to purchase consoles for their own personal use and many games are manufactured with the T (Teen) or M (Mature)

rating, indicating an aging audience. Similarly, video games have traditionally been male-dominated, but that is changing ever so slowly.

Funk and Buchman (1996b) studied 4<sup>th</sup> and 5<sup>th</sup> grade children in 1996 and the children agreed that it was “OK” for boys and girls to play video games. The researchers believe that socialization is becoming more similar though it is not identical yet. More boys thought that it was “OK” for boys to play video games “a lot” and thought that popular boys could play video games. More girls than boys thought a popular girl could play video games a lot. So we see that boys may be less accepting of girl gamers but girls are beginning to change their minds about what a gamer can be. It is quite possible that the natural progression of new media will take video games into mainstream female society if we simply wait long enough (Williams 2003).

For those who would like to even out the gender divide but who have less patience than Williams, there may still be cause for optimism. Recently, there have been some games that have achieved success with mainstream female audiences. These games typically involve more problem-solving, real world skills, social interaction, and customization than previous games. A perfect example of this type of game is “The Sims.” Many of the women I interviewed had played it and even some of the low-moderate gamers recalled having enjoyed it immensely when it first came out (they were in high school at the time).

“The Sims” is the latest of the Sims (short for simulation) line which began in the early 90s with “SimCity”—a game that challenged players to build, develop, and run an entire city to the best of their ability. “SimCity” was very different from other software out at the time and gained popularity with both boys and girls. Later games from the product line included “SimEarth”, “SimAnt”, “SimCoaster”, “SimUniversity” and many versions of “The Sims” in which the player determines the

daily activities and long-term success of customizable avatars called “Sims.” The player can design houses, choose jobs, go on dates, start families, move to the city, or become a star depending on which software is installed and which choices are made for the character.

Unlike many other games, the “Sim” line doesn’t end or even have a real goal, other than to get creative and do what you want to do. Players often converse and share their progress and program tips. As Nutt and Railton (2003) point out, this makes it very appealing to those who find more typical video games repetitive and constraining. Indeed, they point back to Jenkins’ work to show that “The Sims” may be the epitome of the “ideal” game for girls. Many of the women I spoke to did enjoy the Sims games because they involved problem solving (i.e., how to provide power to a growing city without putting power lines over residential areas, or how to earn a Sim enough money to buy a bigger house in the least amount of time) and non-violent, non-competitive social play.

Nutt and Railton also point to the tremendous fan community surrounding “The Sims.” Many players create stories and photo albums based on their in-game personas which they then share with their fellow players in the game fora. As Cumberland (2000) has pointed out, fan writing is more commonly a female pursuit involving strong social ties, creative exploration of emotion and social bonding and occasionally, the breaking of taboos or expectations. The fact that the format of “The Sims” allows and encourages this kind of activity may explain its popularity and help us to see a direction which video game designers might take if they wish to entice more women to buy their products.

Some game designers are doing just that. Schiesel (2005a) talks about a very recent game called “Façade” as an example of the movement toward smarter A.I. that

will allow full customization, realistic social interactions, and a level of emotion and human-computer interaction previously unheard of in game design. The game involves an awkward social situation that must be resolved by the gamer. The prototype sends the player to a dinner party only to reveal that the host and hostess are considering divorce after a long period of marital discord. The atmosphere is tense and it is up to the player to decide how to deal with the situation. S/he can either try to diffuse it, or opt to push the couple to the brink.

With advances in technology and game designers eager to test the limits of games and gamers, it is increasingly likely that a combination of hardware and software will be developed that will be successful with “average” women. Games that offer greater opportunities for customization and socializing may be the key to offering women an “out” in their gaming. Games like “The Sims” are seen by some as good practice for real life (city planning, organization, etc.) and thus may be justifiable as something that is “not-play.” Likewise, game fora offer social opportunities that may encourage women to see games as more social, participatory activities than previously believed.

As we consider ways in which to entice girls to gaming, however, it is worth noting that the girl gamer problem does not seem so dire if these data are any indication. Although many of the women I interviewed were non-gamers, there were no women without *any* video game experience and very few who play no video games at all in the present if we count such activities as computerized solitaire as video games. Although commercial video games (those which must be purchased) were not very popular except among gamers, free games such as solitaire and certain online games were commonly played by most, at least in small amounts. Similarly comforting was the fact that regardless of their feelings about video games, most of

the women interviewed felt very comfortable with technology in general. They used word processing software for their school work, felt comfortable browsing the internet for information and recreation, and many had experience with digital photography, graphics design and editing, web page design, and even basic programming.

Additionally, computers *were* seen as a source of fun, at least in small doses. Even women who hated computer games said that they enjoyed using their computers for shopping, chatting, social networking, and idle surfing. These facts imply that although video games may not be successful with most women, technological skills are still being learned and incorporated into everyday life.

So although we should always aim to encourage equal-opportunities in all things and attempt to minimize gender-related limitations on what is and is not appropriate behavior for adults, at least in the realm of technology-education, video games seem not to be much of a concern. This brings us back the issue of the technology gender gap.

Much of the existing research has been conducted under the assumption that the gender gap in technology-related fields might be minimized through earlier exposure to video games and encouragement of female game play. However, as we have seen, females are not afraid of technology, nor do they fail to equate computers with fun. Furthermore, younger females have been shown to enjoy video games and so additional support of educational games and girl games are not necessary. Instead, we need to focus on changing our perspective from pressuring girls to play video games, to thinking more about how girls play and how we can encourage women to continue playing through adolescence and adulthood.

Perhaps educational games that mix fun and practicality are the answer the adult play problem, but that still assumes that women want *any* games. At a more

basic level, women don't seem to enjoy games, at least not in the form of what is commonly considered a game. Researchers need to rethink the definition of games, and perhaps, all adults should be pushed to do so as well in order to question our assumptions about recreation and appropriate adult behavior, while encouraging gender equality in an activity that has been proven to be essential to a healthy, happy life: play.

## CHAPTER 6: SUGGESTIONS FOR FUTURE RESEARCH

In addition to the possibilities for subjectivity in coding the interviewees on the gamer continuum and coding their responses to discern meaning, there were a few other complications involved in this study that may have affected its results. Further investigations will be useful in either confirming this analysis or bringing to light its shortcomings.

The fact that all subjects of the study were Cornell students (with the exception of one woman who was an undergraduate attending nearby Ithaca College) may be significant. It is possible that certain opinions, habits, or background statistics will prove homogenous among students of the same university. The study was conducted using these students, however, because it was believed that by using Ithaca-area students, access would be easier, and perhaps, clearer comparisons would be possible with the loss of diversifying elements such as school, occupation, and age. It should also be pointed out that Cornell draws to its campus students from a variety of geographic, ethnic, economic, and social backgrounds.

Certainly, future studies will want to look at students from other schools, non-students ages 18-23, individuals outside of the 18-23 age range and if resources permit, individuals of even more varied demographics, eventually looking at women *and* men to make a full, thorough, comparison. Using fewer students had the benefit of allowing me to conduct in-depth personal, and lengthy interviews that I could then transcribe, code, and analyze. For the purposes of generalizability, a larger group of subjects could be very helpful and a team of transcribers could contribute to standardization of coding.

Increased reliability in coding would help to ensure that women are accurately categorized in order to give us a better understanding of the female video game experience while also helping us to better interpret female game-play patterns and come

up with an improved coding schema and gamer spectrum for measuring game play and female play habits. For the purposes of this study, I have come up with a very simple spectrum and largely grouped together non-gamers with low-moderate gamers and gamers with high-moderate gamers in my analysis for the sake of simplicity. A larger sample and a more detailed, standardized spectrum would allow greater understanding of the less obvious differences in the gamer degrees. Alternate methods such as quantitative experimentation and probability-based sampling might also provide unique perspectives on gender issues and should be encouraged as a means to either confirm or challenge existing data.

Another concern to the researcher is diversity. The initial aim of this study was to bypass some of the generalizations and stereotypes that come with gender discussions by ignoring males and focusing on the diversity and variety that exists in the female population alone. The hope was that once females were better understood, improved studies could be conducted which compared females to males. The problem still exists in this study, (though it was addressed as extensively as possible) that gamers and non-gamers are also very diverse groups. There may still be a need to further categorize gamers and non-gamers (low-moderate, moderate, moderate-high is a start, but certainly not all-encompassing) but this would be made easier by larger samples and numerous studies.

Finally, (and perhaps most importantly,) future researchers must work harder to standardize definitions of such essential terms as “game,” “gamer,” “play,” and “video game”. As was mentioned before, “video play” might be a more appropriate term to use when comparing males and females in order to be more inclusive. Furthermore, if researchers cannot agree upon a definition of “game” and “play”, it will never be possible to hold a discussion in which subjects, (who also seem to have confusion and

disagreements regarding definitions) can express their feelings in any meaningful or understandable way.

On a larger scale, it may be necessary for our society to work harder to challenge the gender-based assumptions that (1) mature, responsible women can't play without purpose, but mature, responsible men can, and (2) that females are inherently inferior to men in the world of the gamer. Such internalized beliefs will prove to be the greatest, most challenging obstacles to fair play.

APPENDIX A

Pilot Study

The purpose of this study is to examine the circumstances under which individuals gain access to video games and how early exposure affects play habits. This survey is being conducted by Meredith Hahn, a graduate student in the Communication department.

The survey is completely confidential. Your answers will not be connected with your name, and no one will have access to your personal data except for the researcher. You may stop at any time. The questions generally take 5-10 minutes to complete. Your participation will help us to understand more about video games as recreation.

Please take a moment and answer the following questions as honestly and thoroughly as you can.

I have read the instructions above and I understand that my participation is voluntary and confidential. I understand that I may stop participating at any time and if I have questions, concerns, or complaints, that I may bring them to the Cornell University Committee on Human Subjects.

(Signature) \_\_\_\_\_

(Date) \_\_\_\_\_

Please note that this cover sheet will be detached from your answers and your identity will be carefully guarded.

Pilot Study: Video Game Access

Thinking of when you were a child (age 3-12), please answer the following:

**1.** Did you have a video game console in your household as a child? (Please note: by video game console, we mean such systems as Nintendo, Sega, and Atari game platforms. Please do not include handheld games, arcade games, computer games, or VCR-based games) (Check one):

Yes (If “Yes”, please go on to the next question)

No (If “No”, please skip to **question 13.**)

**2.** How did a video game console come to be in your household? (Note, if you had more than one console, just think about your first console.)

Gift I had **not** asked for/ sibling had **not** asked for

Gift I had asked for/ my sibling had asked for

Something I (or my sibling) bought for Myself (Him/Herself)

**3a.** Did the console have a primary owner or was it a shared toy?

Owner

Shared Toy

**3b.** If there was an owner, who was it? (check one):

You

A Sister

A Brother

A Parent

**4.** How often did you play with the console? Check one:

- Never
- Several times a year
- Several times a month
- Several times a week
- Several times a day

5. Regardless of ownership, who in the family used the console regularly—at least once a week? (check all that apply):

- You
- Older Brother(s)
- Older Sister(s)
- Younger Brother(s)
- Younger Sister(s)
- Parent(s)

6. Who played it the most? (you *may* check more than one if there was a “tie”)

- You
- Older Brother(s)
- Older Sister(s)
- Younger Brother(s)
- Younger Sister(s)
- Parent(s)

7. Which games did you like the best? Please list your favorites below.

**8.** How much would you say that as a child you liked playing video games on a console? (Check one):

Strongly disliked video game console

Disliked video game console

Liked video game console

Strongly liked video game console

**9.** Did you most often play (Check one):

Alone

With Relatives

With Friends

**10.** When did you start playing video games on a game console? Please list an approximate age.

**11.** When (if ever) did you stop playing with a game console? (approx. age):

**12.** If you stopped playing with your console, what was the reason?

Still thinking of yourself from ages 3-12, please answer the following questions.

**13.** Did you have regular access to a game console *outside* your household? (i.e., a friend's house, close relative, neighbor, etc.) Note: By regular access, we mean access to a console at least once a week.

Yes (If "Yes", go on to the next question)

No (If "No", go to the next page)

**14.** Where was this console? (List all locations that apply)

**15.** Was the primary owner of this console (Circle your answer):

Older than you?      Yes              No

Younger than you?    Yes              No

Male?                      Yes              No

Female?                    Yes              No

A regular game-player (Someone who played with the console at least once a week)?

Yes              No

**16.** What video games did you typically play with this person? (Please list the games below)

**17.** Among these games, did you have a favorite? (Please list)

*Still thinking of yourself from ages 3-12*, please answer the following questions.

**18.** If you played video games with friends as a child, were most of these friends males, females, or a mixture?

Males

Females

Mixture

Did not play video games with friends

**19.** As a child, did you go to video arcades?

Yes

No

**20.** If you went to video arcades, did you enjoy this activity?

Yes

No

Did not go to video arcades

*Thinking about yourself in the present*, please answer the following questions:

**21.** Do you *currently* own a video game console (Nintendo, Play Station, X-Box, etc.)?

(Please do not include any consoles which you did not bring to campus)

Yes

No

**22.** Do you have regular (at least once a week) access to a video game console? (friend, neighbor, house lounge, etc.)

Yes

No

**23.** How much do you like playing video games on a console? (Check one)

Strongly like

Like

Dislike

Strongly dislike

**24.** How often do you typically play video games on a console?

Never

Several times a year

Several times a month

Several times a week

Several times a day

**25.** Do you have any favorite video games?

Yes (If “Yes”, please list them below)

No

**26.** Do you play computer games that came with your computer?

(Hearts, Free Cell, Solitaire, Pin Ball, Mine Sweeper, Checkers, Etc.)

Yes

No

Don't own a computer

**27.** Do you play computer games that did **not** come with your computer?

(RPGs, online video games, CD Rom games, casino games, simulators, etc.)

Yes

No

Don't own a computer

**28.** Do you play games on your: (please check all that apply)

Calculator

Cellular Phone

PDA/Palm Pilot/Blackberry

Other (please specify) \_\_\_\_\_

**29.** Do you play handheld versions of games such as Poker, Solitaire, Game Shows (Wheel of Fortune, Family Feud, etc.) or handheld versions of console games (Nintendo, Playstation Portable, etc.)

Yes

No

**30.** Thinking about all types of video games, do you typically play alone or with others?

Alone

With Others

I Don't Play Video Games

**31.** If you play video games with others, do you mostly play with females, males, or a mixture of males and females?

(check one)

Males

Females

Mixture of males and females

Do not play video games with others

**32.** Do you enjoy going to video arcades?

Yes

No

I don't go to video game arcades

**33.** What are your parents' opinions on video game play? (check one)

**33a.** My mother:

- Strongly approves of video game play
- Approves of video game play
- Disapproves of video game play
- Strongly disapproves of video game play
- I do not know if my mother approves or disapproves

**33b.** My father:

- Strongly approves of video game play
- Approves of video game play
- Disapproves of video game play
- Strongly disapproves of video game play
- I do not know if my father approves or disapproves

**34.** In your opinion, how much fun are video games?

- They are very fun
- They are somewhat fun
- They are somewhat not fun
- They are not fun at all

**35.** In your opinion, how good are video games as a use of your time?

- Video games are a very good use of my time
- Video games are a somewhat good use of my time
- Video games are a somewhat bad use of my time
- Video games are a very bad use of my time

**36.** Do you have anything else that you would like to tell us? (Your thoughts on video games, your play habits, your experiences with video games?)

**37.** Please describe your family (Names are unnecessary but we would like to know about the ages and genders of your siblings and parents. Please include any step-siblings or half-siblings that lived in your household with you.)

**38.** Please mark your gender:

- Male
- Female

**39.** In what year were you born? \_\_\_\_\_

**40.** Would you describe yourself as: (check all that apply)

- White
- Black or African American
- Latino or Hispanic
- Asian or Pacific Islander
- Native American or Alaska Native
- Other

**41.** Do you have any questions or comments about the survey (referring to either individual questions or the survey format)?

**42.** Would you be willing to answer more in-depth questions about your video game habits at another time? If so, please provide your contact information below.

If you have any questions or concerns about this study, please contact Meredith Hahn at [msh49@cornell.edu](mailto:msh49@cornell.edu). Feedback about survey questions and topics is welcome. If you feel that you have been treated unfairly or unsafely by this study, please contact the Cornell University Committee on Human Subjects. Thank you for your time and assistance. Your participation is greatly appreciated.

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