Video Games: Males Prefer Violence while Females Prefer Social

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Summary. In the last issue of Usability News, we reported on the general gaming preferences and behaviors of current video game players. In this study we broke down the gaming patterns by gender and report video game usage, preferences, behaviors, and spending habits for males and females. Results reveal that males overwhelmingly played more violent video games than females. However, females reported playing both violent and non-violent almost equally. Males were more likely than females to be drawn to games from the Strategy, Role Playing, Action, and Fighting genres whereas females were more likely than males to play games from the Social, Puzzle/Card, Music/Dance, Educational/Edutainment, and Simulation genres. Overall, more males than females treated video game playing as their primary hobby, while females viewed playing video games as less important than other hobbies such as watching television.

Note: This is a summary of the article "Examining the Role of Gender in Video Game Usage, Preference, and Behavior" in the Proceedings of the Human Factors and Ergonomic Society, Boston, MA 2012.

INTRODUCTION

In recent years the video game industry has experienced a consistent shift in the demographics of video game players and their consumers. Specifically, video game players are no longer predominantly male teenagers (Casell & Jenkins, 1998; Wright et al., 2001). As of 2011, the average age of a video game player is approximately 37 (ESA, 2011), with 29% of players being over the age of 50. The gender gap in video games has also shifted to approximately 42% of video game players now being female, a 2% increase from 2010 (ESA, 2010; ESA, 2011).

The video game industry has certainly taken notice to the growing number of female video game players. Some game companies (e.g., Nintendo, Zynga) have started to develop and publish more video games and video game-related products specifically targeting female players. Unfortunately, when companies develop video games and products with females in mind they often base their game designs on stereotypical gender roles. For example, many game companies believe that female players are attracted to games with the color pink; fashion, shopping, and dating games; and that they dislike games with violence, gore, and complex scenarios. This thinking is likely to be oversimplified, misleading, and reflects the stereotypical beliefs of the male dominated gaming industry and not necessarily the true interests of female game players (Stredder, 2001; Jenson & de Castell, 2007).

Purpose

The objective of this study was to determine if there are gender differences between male and female gamers in terms of video game usage, preference, and behavior. It was our hope that the results from this analysis will help video game developers better understand the preferences and behaviors of video game players in order to design video games that appeal to both genders.

METHOD

A total of 341 people who play video games completed the video games usage survey. Approximately 73.90% of the respondents were male (n = 252) while the remaining 26.10% were female (n = 89). Respondents' ages ranged from 18 to 51 (M = 21.65, SD = 4.43). The majority of respondents were White (73%), 11% were Asian/Pacific Islander, 6% were multiracial, 4% were Hispanic/Latino, 3% were Black/African American, and the remaining 4% either classified as "Other" or they did not wish to respond.

Many respondents (73%) were full -time students, 7% were part-time students, and the remaining 20% were not in school. Additionally, the majority of respondents were single (69%), had some college or were college graduate (61%), and earned less than $25,000 a year (64%). Overall, many of the respondents did not have a specific occupation aside from being a student (31%) or that they did not wish to disclose their occupation (25%). The remaining respondents were varied in terms of their occupation. Some of the occupations listed included web/game developers, software engineers/programmers, sales clerks, tutors, researchers, chefs, and teachers.

RESULTS

Results are analyzed in terms of general video game usage, video game preference (i.e., amount of violent content in the games, types of games played), and behaviors and attitudes toward video games.

General Video Game Usage

Multiple independent samples t tests were conducted to determine if male gamers and female gamers differ in the age that players reported to first play video games, and the amount of time they spent playing games on a desktop/laptop computer and other system devices. Results revealed that female gamers (M Age = 9.30, SD = 4.18) reliably reported that they started to play video games at an older age than male gamers (M Age = 6.60, SD = 2.47). Additionally, male gamers spent more hours per week (M = 17.46, SD = 19.72) playing games on the computer than female gamers (M = 6.51, SD = 12.58). Male and female players did not differ in terms of the amount of hours they spent playing games on other devices.

A chi-square test of independence revealed that male respondents were significantly more likely to classify themselves as "Frequent" or "Expert" video game players while female respondents were more likely to classify themselves as "Occasional", or "Novice" game players. Figure 1 shows the types of video game players broken down per gender group.
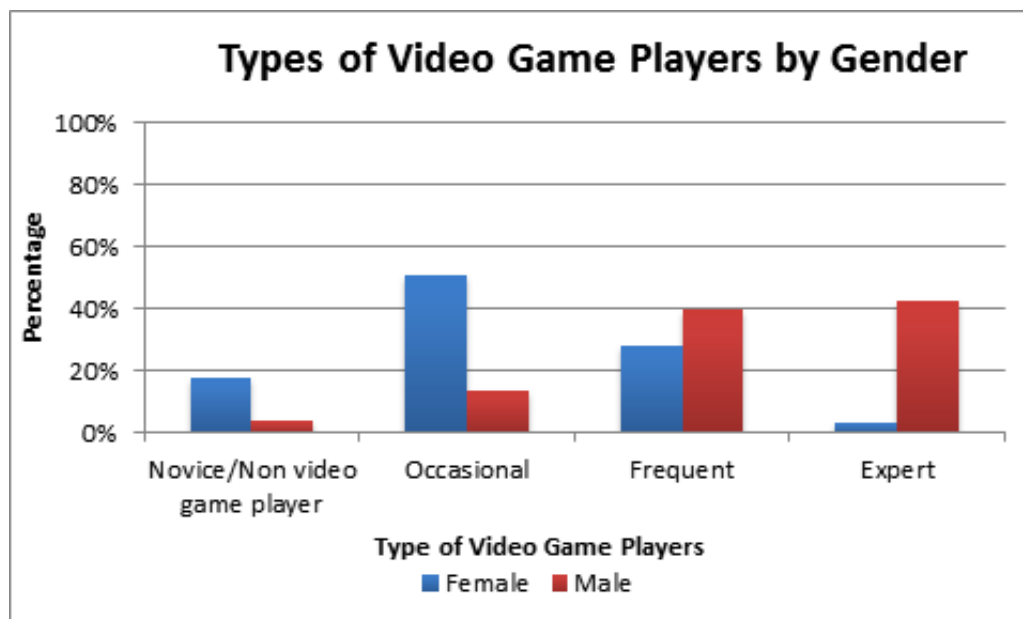
Figure 1. Percentage of respondents classifying themselves as one of the four types of video game players by gender.

Gaming Device Usage and Preference

Results from a chi-square test of independence showed that more male players significantly preferred playing games on the computer whereas more female players tend to prefer playing games either on the console or handheld/mobile device. Figure 2 shows the percentage of the most preferred gaming device by gender.
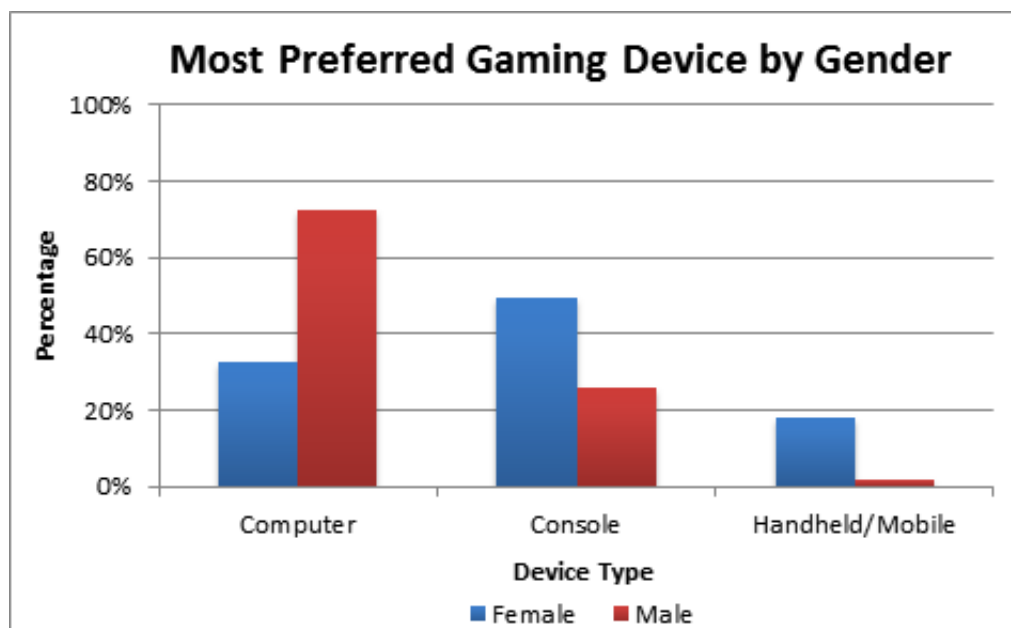

Figure 2. Percentage of respondents' most preferred gaming device based on gender.

In terms of the specific console and handheld devices that the respondents used to play games, both male and female players reported using similar devices. The top three console systems that male respondents use to play games are Xbox 360, Wii, and PS3. The top three console systems female respondents reported to use are Wii, Xbox 360, and PS2. For the top three handheld devices, both gender groups reported using the same devices, which are Nintendo DS, Gameboy Advance, and Nintendo Gameboy/Gameboy Color.

Game Preference

Results from a 2x2 chi-square test indicated that significantly more men (84.92%) than women (46.07%) reported that they played violent games (See Figure 3).
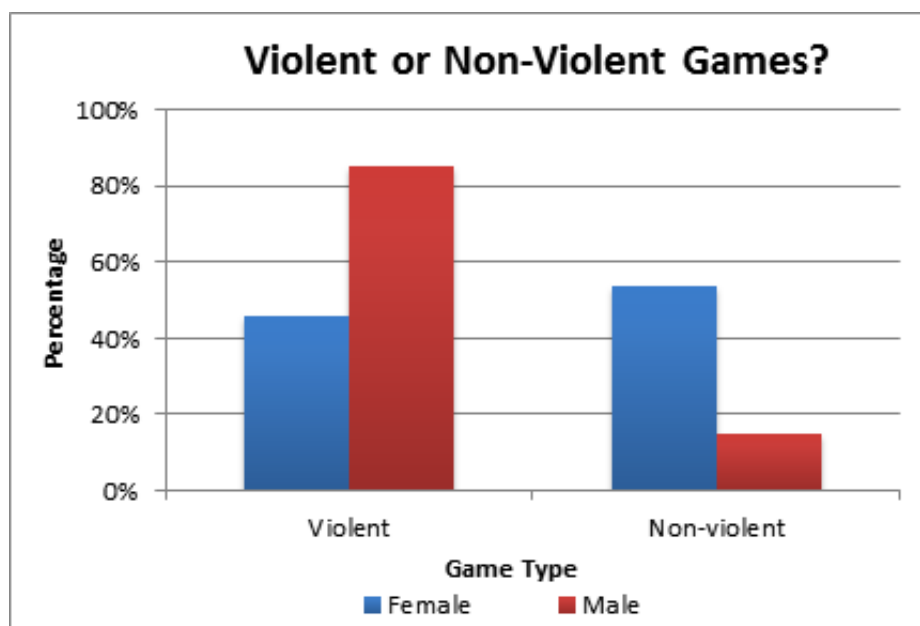

Figure 3. Percentages of respondents reporting which type of video games (violent vs. non-violent) they played most often.

Multiple chi-square tests of independence were conducted to examine the relation between gender and the frequency of playing each of the game genres. In sum, male gamers reported that they tend to play games from the Strategy, Role Playing, Action, and Fighting genres more often than female gamers. Conversely, female gamers reported that they play games from the Social, Puzzle/Card, Music/Dance, Educational/Edutainment, and Simulation genres more frequently than male gamers. The three game genres that both male and female players reported to play approximately with equal frequency were Sports, Driving, and Adventure.

Behaviors and Attitudes

Results from a series of Multiple Mann-Whitney U tests showed that more male gamers tended to play video games at all times (i.e., during the day, weekends, and evenings) than female gamers. In comparison to female gamers, male gamers were more likely to indicate that gaming was immersive and that they preferred non-physically interactive games. Male gamers were also more likely than female gamers to indicate that they played games for long periods of time, disliked interruptions while gaming, thought of gaming as their main hobby, and spent more time gaming than watching TV or doing household chores.

Female game players reported that they were less likely to be involved in video games and were less passionate about video games than male players. Additionally, in comparison to male players, female players were more likely to report that they spent more time doing non-video game activities (e.g., watching TV, household chores), and that they preferred watching TV over playing video games. Females also were more likely to report that (i) they feel guilty when they game, (ii) they would sell their gaming console(s) first if they were short on cash, (iii) they tend to play when others are playing, and (iv) they preferred physically interactive games.

Game Cost and Television Viewing

Results from an independent samples t-test showed that male players spent significantly more dollars per year on video games (*M* = $333.92, *SD* = $606.92) than female players (*M* = $87.19, *SD* = $139.61).

In regard to hours spent watching television per week, results from a chi-square analysis indicated that female respondents reported spending more hours per week watching television than male respondents. Figure 4 shows the breakdown of television viewing by gender.
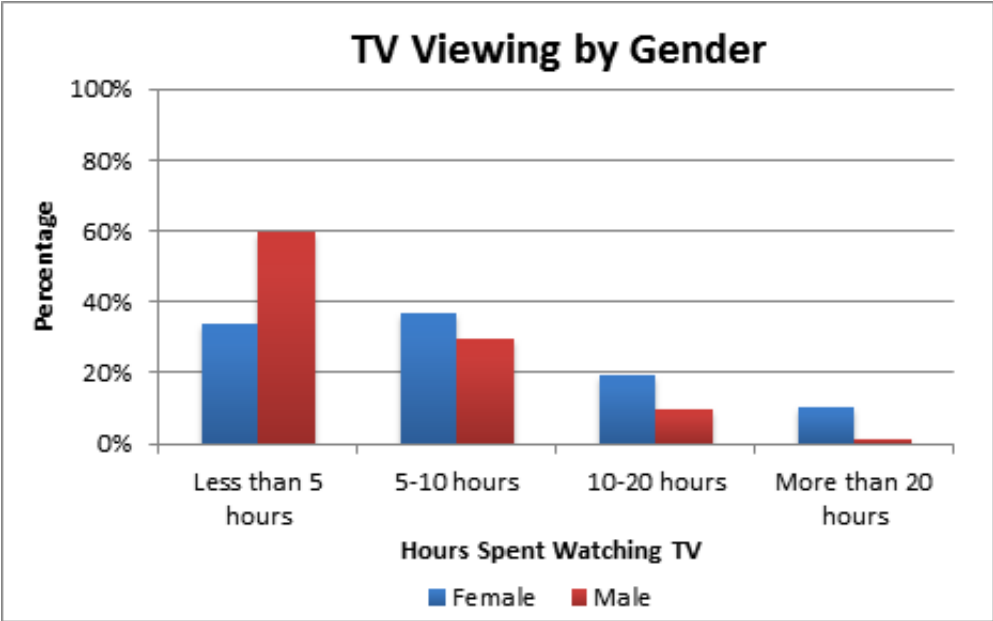

Figure 4. Frequency of respondents' Social game play by gender.

DISCUSSION

In summary, we identified many gender differences in terms of video game usage, preference, and behavior. Table 1 presents the general profile of the male and female gamers in this study.

Table 1. General Profile of Male Game Players vs. Female Game Players

	Male Players	**Female Players**
Average age first started to play video games	6.60	9.30
Hours per week spent playing games on a desktop/laptop computer	17.46	6.51
Average $ spent on video games and game-related purchases per year	333.92	87.19
Type of video game player classified	Frequent/Expert	Occasional/ Novice
Gaming device preference	Desktop/Laptop Computer	Console/Handheld/Mobile
Preference for violent vs. non-violent content	Strongly Violent	Equal preference
Game genre preference	Strategy, Role Playing, Action, and Fighting	Social, Puzzle/Card, Music/Dance, Educational, and Simulation
Preference for physically interactive vs. non-physically interactive games	Non-Physically Interactive	Physically Interactive
Likelihood of playing games at all times and	More Likely	Less Likely

for long periods of time		
Likelihood of playing games when others are playing	Less Likely	More Likely
Likelihood of feeling guilty when playing video games	Less Likely	More Likely
Playing video games as the main hobby	Yes	No
Prefer doing other activities (e.g., watching TV) rather than playing video games	No	Yes
Hours per week spent watching TV per week	Less than 5 hours	More than 5 hours

Many of the results in this study are consistent with previous findings in the video games literature in terms of the types of games males and females tend to play. However, the current study provides more detailed information about video game usage and preference among male and female gamers such as specific gaming device usage and game preferences across the 12 common game genres. Future research should examine a wider range of male and female gamers as well as the design features which make certain video games more desirable to play.

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