Examining the Role of Gender in Video Game Usage, Preference, and Behavior

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1. Introduction

• Over the past 40 years, the video game industry has undergone drastic changes.

• In 2011 approximately 72% of U.S. households play video games, an increase of 5% from 2010 (ESA, 2010; ESA, 2011).

• Video game players are no longer predominantly male teenagers (Casell & Jenkins, 1998; Wright et al., 2001).

• The average age of video game player is approximately 37 (ESA, 2011), with 29% of players being over the age of 50.

• Approximately 42% of video game players now being female, a 2% increase from 2010 (ESA, 2010; ESA, 2011).

• Half of people who played social games were females, who tend to be older (Information Solutions Group, 2010).

• Games targeting female players often are based on the stereotypical beliefs of the male dominated gaming industry instead of the true interests of female game players (Sneadder, 2001; Jenson & de Castell, 2007).

2. Purpose

• Determine if there are gender differences between male and female gamers in terms of video game usage, preference, and behavior.

3. Method

Participants

- N = 341
- Age ranged from 18-51 (M = 21.65, SD = 4.43)
- Student: 80%, Single: 69%, <$25,000: 64%
- Varied in occupations (e.g., sales clerks, tutors, researchers, chefs, teachers, engineers, and web/game developers)

Materials

- A 63-item video game questionnaire
- Questions about basic demographics, video game usage, preferences, and spending habits
- 23 items about their video game behaviors and attitudes adapted from a video game survey (Thornham, 2008)

Procedure

- Distributed on Wichita State University’s SONA Experiment Management System, Facebook, Google+, and game forums
- 20-30 minutes to complete the survey
- Collected from October to November, 2011

4. Results

4.1 General Video Game Usage

Table 1. Gender Differences for Age and Type of Gaming Devices

<table>
<thead>
<tr>
<th></th>
<th>Female Gamers</th>
<th>Male Gamers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age first played video games¹</td>
<td>M = 9.30</td>
<td>M = 6.60</td>
</tr>
<tr>
<td>Playing games on computer (hours/week)²</td>
<td>M = 6.51</td>
<td>M = 17.46</td>
</tr>
<tr>
<td>Playing games on consoles &amp; other devices (hours/week)³</td>
<td>M = 5.40</td>
<td>M = 4.81</td>
</tr>
<tr>
<td>Frequency of video game activities in the last 5 years: 48% played games less frequently, 32% played more frequently; 20% reported little change in their game activities.</td>
<td></td>
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</tr>
</tbody>
</table>

4.2 Gender Differences for 12 Game Genres Frequently Played

<table>
<thead>
<tr>
<th>Game Genre</th>
<th>Female Gamers</th>
<th>Male Gamers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>M = 9.30</td>
<td>M = 6.60</td>
</tr>
<tr>
<td>Puzzle/Card</td>
<td>M = 4.18</td>
<td>SD = 2.47</td>
</tr>
<tr>
<td>Music/Dance</td>
<td>M = 12.58</td>
<td>SD = 19.72</td>
</tr>
<tr>
<td>Educational</td>
<td>M = 5.40</td>
<td>M = 4.81</td>
</tr>
<tr>
<td>Simulation</td>
<td>M = 7.04</td>
<td>SD = 7.81</td>
</tr>
</tbody>
</table>

4.3 Type of Video Game Players

Figure 1. Males tended to classify themselves as “Frequent” or “Expert” while females tended to classify as “Occasional” or “Novice” game players.

4.4 Gaming Device Usage & Preference

Figure 2. Males preferred playing games on the computer whereas females preferred to play either on the console or handheld/mobile.

4.5 Gaming Behaviors and Attitudes

Table 3. Summary of the Ratings of 23 Video Game Statements (1 = Strongly Disagree, 5 = Strongly Agree)

5. Discussion

• Current study extends the video game usage and preference findings that similar studies in the past did not address.

• Females are more fair-weather, social gamers while males are more intense in their game-playing behavior, become more immersed, and prefer violent games.

• Results are consistent with previous findings in the video games literature (e.g., Eden et al., 2010; Greenberg et al., 2010).

• Future studies should examine user perceptions of user interface design preferences associated with video games.