DIFFERENCES IN VIDEO GAMING HABITS AMONG YOUNG ADULTS IN SPAIN DISAGGREGATED BY SEX

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KEYWORDS

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ABSTRACT

This study examines sex differences in video game usage among young adults in Spain. A cross-sectional observational study was conducted with 500 participants aged 18 to 24. The findings show that women prefer playing solo (69.8%), while men favour online multiplayer games (55.7%). Men spend more time gaming and prefer action and sports genres, whereas women gravitate toward social and simulation games. Additionally, women report lower self-perceived gaming skills in certain tasks. The study concludes that significant gender differences exist in gaming habits, genre preferences, and skill perception.

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1. Introduction

ver the past few decades, video games have evolved from simple pixelated toys into complex experiences involving an increasingly numerous and diverse audience (Duggan, 2015). Technical advancements and format developments have enabled the incorporation of increasingly detailed narratives, more expressive graphics, and new forms of interactivity. As a result, video games have become a cultural product that, much like novels or comics, can encompass multiple spheres, ranging from mere entertainment to education through serious games (Belloti et al., 2013) or political propaganda (Akbar & Kusumasari, 2022; McGowan et al., 2022). They have transitioned from a cultural niche to an activity enjoyed by millions of people.

The rise of video games as a cultural phenomenon has inspired a substantial body of research concerning their influence on players. Over the years, a vigorous and ongoing debate has developed regarding their effects and impact. Negative effects have been identified (Greitemeyer, 2022), particularly among young people (Ferguson, 2007; Jamel et al., 2019). Conversely, a body of studies has also emerged exploring their potential benefits (Granic et al., 2014; Markey et al., 2021). Moreover, with the growth of online multiplayer games, video games have become a social activity, fostering their own communities and helping players develop social skills (Arbeau et al., 2020; Kowert & Oldmeadow, 2013; Yilmaz et al., 2022). This broad spectrum of studies reflects the complexity of their potential influence, its multifaceted nature, and the need for further in-depth investigation.

As noted by Pan (2023), when the industry began, its early users were predominantly computer engineers, a field where men were notably prevalent. This directly influenced the composition of professionals and consumers in the sector, leading to an industry primarily composed of men, as they were more likely to pursue this career path and consume these resources. As the same author points out, this has resulted in the persistent issue of a lack of female voices in the video game creation process.

The traditional video game industry has identified its target user base as heterosexual white males. This has led to a design and experience improvement process focused on this demographic (Pan, 2023). Nevertheless, video games have established themselves as the most popular form of leisure in Spain, surpassing traditional industries such as cinema and music in consumption and revenue (Asociación Española de Videojuegos, 2021). This sector has not only demonstrated resilience against economic crises but has also shown sustained global growth, acquiring significant cultural, political, and economic influence (Checa Godoy, 2009; Muriel & Crowford, 2023).

Despite their relevance, video games continue to be perceived as a predominantly male pastime, although current figures reflect a different reality: 45% of players are women (DEV, 2016). Furthermore, data from the Asociación Española de Videojuegos (Asociación Española de Videojuegos, 2024) indicate that gender parity in this field is nearing, with 9.73 million female players compared to 10.14 million male players in Spain. These figures suggest that the gender gap among video game players has been narrowing over the years (Entertainment Software Association, 2024; Ghosh, 2021; Scidone et al., 2024). Despite this, the video game landscape remains fertile ground for stereotypes. This is evident in significant details, such as women still being labelled as "casual gamers" while men are considered "hardcore gamers" (Paaßen et al., 2017). This creates a biased construction of female identity in the gaming space, leading to hostile reactions in online environments towards female players or even instances of harassment (Ruvalcaba et al., 2018). A similarly biased representation is readily identifiable in examples such as the portrayal of female characters, widely studied (Fox & Tang, 2014; Gestos et al., 2018; Perry, 2021; Sanz-Marcos & Meléndez González-Haba, 2025), and notably characteristic in the armour of many RPGs, where the exposed skin of female avatars far exceeds that of male ones (Beasley & Collins Standley, 2002).

It remains striking that these differences persist alongside a narrowing gender gap. Some authors (Kowert et al., 2017) attribute this to the exclusion of women from gaming culture. This exclusion manifests in the limited female participation across various aspects of this culture. The first aspect involves a gender-biased relationship with technology and socialisation, framing it as a male activity. The second aspect is the video game industry itself and its development choices. The third aspect comprises player communities. Across these three domains, the narrative predominantly targets a male audience, leaving little room for content relevant to women, which, as previously noted, is limited and sexualised (Cote, 2020). These findings highlight the need to reconsider not only who plays, but also what is played and the differences between the sexes.

This article seeks to complement the existing body of research by analysing differences between men and women in the selection and use of video games among young adults. To this end, the following research questions are posed:

- 1. Are there differences in gaming habits among young people based on whether they are male or female?
- 2. Which video game genres are preferred by young people? Are there differences between men and women in their selection?
- 3. What differences exist in the perception of their skills as players between men and women?

2. Methods

2.1. Design and Objectives

This research is structured as a multicentre study with a mixed observational (descriptive-analytical) cross-sectional design, employing cluster sampling. The study protocol was approved on 31 July 2024 by the Clinical Research Ethics Committee of the Universidad Internacional de La Rioja (PI: 022/2024).

The primary objective of the study was to identify the video game profile and skills among young adults in Spain, taking into account the participants' sex.

2.2. Sample

Participant recruitment was conducted nationwide, involving individuals from all autonomous communities of Spain. The number of participants was proportional to the population of each autonomous community, with higher numbers in those with larger populations (Catalonia, Community of Madrid, and Andalusia). Both participant recruitment and data collection took place in May 2024.

The sole selection criteria for participants were that they be "young adults" aged 18 to 24 years (inclusive), be video game players, and, prior to data collection, sign an informed consent document agreeing to participate in the study freely and voluntarily

2.3. Evaluation

For data collection, an online questionnaire was administered, containing the following sections:

- 1) "About You" (sociodemographic data and general video game consumption habits): age, sex, time spent gaming, preferred video games, genres, and devices, etc.
- 2) Skills as a player: a bespoke 10-question questionnaire asking participants about their abilities in navigating 3D games, challenge-based games, resource management, puzzles, or cooperation. Participants could self-report their skill level on a 5-point Likert scale ("It is easy for me and I am very good at it," "I am reasonably good at it," "I am good at it," "I have some difficulties with this type of task," "I cannot do this type of task at all").

2.4. Statistical Analysis

For the descriptive analysis of categorical variables, frequency distributions and percentages were calculated. For continuous variables, measures of central tendency (mean) and dispersion (standard deviation) were used.

For bivariate analyses (comparisons by sex), Chi-square tests were primarily employed for categorical variables. To compare means between two groups, Student's t-tests or Mann-Whitney U tests were used, depending on the normality of the variables.

Statistical analyses were conducted anonymously by an independent expert using Jamovi Version 2.6.2 software (The Jamovi Project, 2021).

3. Results

3.1. Sample Description

A total of 500 subjects participated. Fifty-three percent of the participants were women. The mean age was 22.2 () years. The majority of participants indicated a preference for playing video games solitarily (60%), compared to 9.8% who preferred playing in virtual worlds or MMORPGs (Massively Multiplayer Online Role-Playing Games). The most played video game genre was "social games" (44.6%), followed

by "adventure" games (42.4%). Most players reported gaming for less than 5 hours per week on each device (console, tablet, PC). The preferred gaming time was the afternoon (55.4%) and before bedtime (43.6%).

3.2. Player Characteristics

The majority of players (60%) prefer to play solo (Table 1). In second place, the preferred player mode is online multiplayer (43.2%). The least attractive options were playing through virtual worlds (9.8%), in-person multiplayer (22%), and online team play (21.4%).

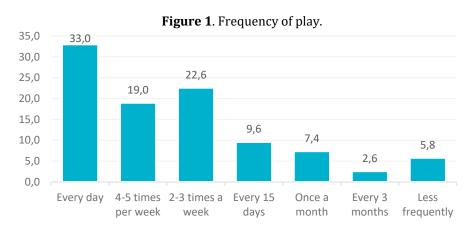
A significant difference is observed between men and women in their choice of solo play. While women opt for this mode in 69.8% of cases, the figure drops to less than half for men (48.9%). This trend complements the fact that online multiplayer is far more popular among men (55.7%) than women (32.1%). No significant differences between men and women were observed in the remaining play modes.

Table 1. Preference for play mode and frequency (%).

	TOTAL	Women	Men	р
	(N = 500)	(n = 265)	(n = 235)	
Play mode, frequency (%)				
Solo	300 (60)	185 (69,8)	115 (48,9)	<,001
Solo, with others sharing the controller	80 (16)	44 (16,6)	36 (15,3)	,696,
Multiplayer, in the same room	110 (22)	64 (24,2)	46 (19,6)	,218
Multiplayer, online	216 (43,2)	85 (32,1)	131 (55,7)	<,001
Online team play	107 (21,4)	53 (20)	54 (23)	,418
Virtual worlds or MMORPGS	49 (9,8)	28 (10,6)	21 (8,9)	,541

Source: Own elaboration, 2025.

Regarding the weekly time dedicated to video games, 74.6% of participants play at least once a week (Fig. 1). Within this group, the most common option is daily play, preferred by 33% of respondents. At the other extreme, the least frequent play pattern is that of those who play every three months, representing only 2.6% of the sample.



Source: Own elaboration, 2025.

Upon analysing the distribution by sex (Table 2), differences in gaming frequency are observed. Nearly half of the men (49.1%) play daily, whereas this proportion decreases significantly among women, reaching only 18.9%. This indicates that men engage in much more continuous use of video games, while the female gaming pattern is more sporadic. For women, the most frequent option is playing 2-3 days per week (25.4%), whereas 37.9% do so with a fortnightly or less frequent periodicity. In contrast, 89.3% of men play at least once a week, reinforcing the trend towards greater regularity in their video game usage.

Table 2. Gaming frequency by sex.

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	Male	Female			
Every day	49,1%	18,9%			
4-5 times per week	20,5%	17,8%			
2-3 times per week	19,7%	25,4%			
Every 15 days	3,4%	14,8%			
Once a month	4,7%	9,8%			
Every 3 months	0,9%	4,2%			
Less frequently	1,7%	9,1%			

Source: Own elaboration, 2025.

The most intensive players, those dedicating more than 20 hours per week to video games, show a higher incidence in the use of mobile devices (6.8%), followed by consoles (5.6%), and to a lesser extent, PCs (4.2%). The least utilised platform is the PC, with 18% of users stating they never use it and 43% using it for less than 5 hours per week. If we consider users who utilise devices for more than 5 hours per week, mobile devices lead with 41% of usage, followed by consoles at 39% (Table 3).

Significant differences between sexes are observed in all cases. Women do not use PCs in nearly half of the instances (49.2%), and when combined with those using it for less than 5 hours per week, the figure rises to 79.5%. A similar pattern is seen in the use of consoles among women: 22.7% of women do not use them, and 48.5% use them for less than five hours per week, totalling 71.2%. The number of women who do not use consoles almost doubles that of men (22.7% compared to 12.8%). The most utilised platform by women is mobile devices, with 68.6% using them between less than 5 hours and up to 10 hours per week.

The use of mobile devices and tablets is similar between men and women. Across all platforms, men account for the largest proportion of intensive players: 10.3% on consoles for men compared to 1.5% for women, or 10.3% on mobile devices compared to 3.8%.

It should be noted that, while the present study focused on the use of devices such as consoles, computers, and mobile devices, future research could also consider the television as a relevant platform for video game practice, particularly in contexts where consoles are connected to this medium.

Table 3. Weekly gaming hours by platform.

	TOTAL(N = 500)	Women $(n = 265)$	Men $(n = 235)$	p
Weekly gaming hours (console), freq (%)				
0	90 (18)	60 (22,6)	30 (12,8)	<,001
<5	215 (43)	129 (48,7)	86 (36,6)	
5-10	113 (22,6)	48 (18,1)	65 (27,7)	_
11-15	36 (7,2)	18 (6,8)	18 (7,7)	-
16-20	18 (3,6)	6 (2,3)	12 (5,1)	•
>20	28 (5,6)	4 (1,5)	24 (10,2)	•
Weekly gaming hours (PC), freq (%)				
0	217 (43,4)	131 (49,4)	86 (36,6)	<,001
<5	144 (28,8)	80 (30,2)	64 (27,2)	-
5-10	76 (15,2)	34 (12,8)	42 (17,9)	_
11-15	25 (5)	9 (3,4)	16 (6,8)	_
16-20	17 (3,4)	7 (2,6)	10 (4,3)	•
>20	21 (4,2)	4 (1,5)	17 (7,2)	•
Weekly gaming hours (mobile/tablet), freq (%)				
0	79 (15,8)	45 (17)	34 (14,5)	<,001
<5	216 (43,2)	120 (45,3)	96 (40,9)	-
5-10	112 (22,4)	62 (23,4)	50 (21,3)	-
11-15	41 (8,2)	23 (8,7)	18 (7,7)	-
16-20	18 (3,6)	5 (1,9)	13 (5,5)	-
>20	34 (6,8)	10 (3,8)	24 (10,2)	-

Source: Own elaboration, 2025.

Male players appear to engage in more intensive gaming sessions across all platforms, which is corroborated by the duration of gaming sessions (Table 4). It is observed that 25% undertake gaming sessions lasting more than 4 hours. However, the incidence of these sessions is substantially higher among men (8.1% compared to 2.3%). For all duration ranges, session lengths are greater among men, except for those lasting less than one hour.

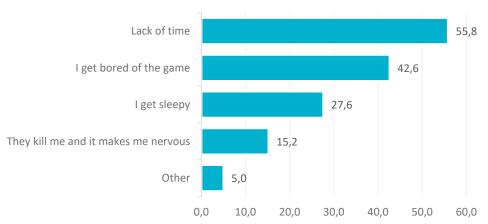
Table 4. Duration in hours of gaming sessions.

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	TOTAL	Women	Men	p	
	(N = 500)	(n = 265)	(n = 235)		
Duration in hours of sessions, freq (%)					
<1	118 (23,6)	86 (32,5)	32 (13,6)	<,001	
1-2	273 (54,6)	139 (52,5)	134 (57)	_	
3-4	84 (16,8)	34 (12,8)	50 (21,3)	_	
>4	25 (5)	6 (2,3)	19 (8,1)		

Source: Own elaboration, 2025.

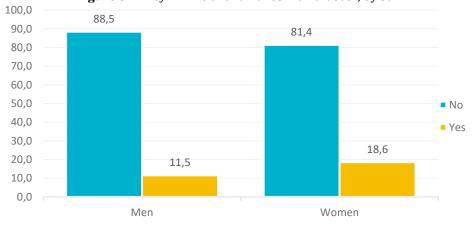
The reasons for ending gaming sessions (Figure 2) were predominantly lack of time (55.8%), followed by boredom (42.6%). A less common reason selected was "they kill me and it makes me nervous," chosen in 15.2% of cases (Figure 3). A significant difference was observed between men and women in this regard, with a higher selection by women (18.6% compared to 11.5%).

Figure 2. Reasons for ending gaming sessions.



Source: Own elaboration, 2025.

Figure 3. "They kill me and it makes me nervous", by sex.



Source: Own elaboration, 2025.

Regarding gaming schedules (Table 5), the majority of players prefer to play in the afternoon (55.4%), followed by the night (43.6). No significant differences between men and women were found in most cases, except for the option "whenever I can," where men nearly double the percentage of

women (22.1% compared to 10.6%). This suggests greater flexibility and availability of time among male players compared to female players.

Table 5. Preference for gaming schedule and frequency (%).

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	TOTAL	Women	Men	p
	(N = 500)	(n = 265)	(n = 235)	
Gaming schedule, frequency (%)				
Morning	51 (10,2)	23 (8,7)	28 (11,9)	,233
Afternoon	277 (55,4)	156 (58,9)	121 (51,5)	,098
Before bedtime	218 (43,6)	131 (49,4)	87 (37)	,005
Early morning	44 (8,8)	22 (8,3)	22 (9,4)	,676
Whenever I can	80 (16)	28 (10,6)	52 (22,1)	<,001

Source: Own elaboration, 2025.

Regarding the most common game genres (Table 6), Social Games stand out (44.6%), followed by Adventure Games (42.45) and First-Person Shooter (FPS) or Action Games (39.6%). The next most popular genres are Puzzles (34.6%), Sports (33.6%), and Simulation (33.4%). The least played genres were Survival (24.2%), Role-Playing Game (RPG) (18.8%), and Strategy (18.8%), indicating a general lower interest in these types of games.

Table 6. Preference for game genre and frequency (%).

	TOTAL	Women	Men	р
	(N = 500)	(n = 265)	(n = 235)	
Game genre, freq (%)				
FPS/Action	198 (39,6)	75 (28,3)	123 (52,3)	<,001
Adventure	212 (42,4)	105 (39,6)	107 (45,5)	,182
RPG	94 (18,8)	36 (13,6)	58 (24,7)	,002
Strategy	94 (18,8)	43 (16,2)	51 (21,7)	,118
Sport	168 (33,6)	56 (21,1)	112 (47,7)	<,001
Survival	121 (24,2)	58 (21,9)	63 (26,8)	,200
Simulation	167 (33,4)	120 (45,3)	47 (20)	<,001
Social games	223 (44,6)	141 (53,2)	82 (34,9)	<,001
Puzzles	173 (34,6)	133 (50,2)	40 (17)	<,001

Source: Own elaboration, 2025.

Clear differences exist in video game genres depending on whether players are men or women. Women tend to prefer social games (53.2%), puzzles (50.2%), and simulation (45.3%), while men prefer FPS/action (52.3%), sports (47.7%), and adventure (45.5%). The differences are significant in all cases (p=>0.001), except for the adventure genre (p=0.182), where preferences show a lesser difference. For the remaining genres, despite having fewer selections in absolute terms, there is a greater number of male players. The largest difference is observed in RPGs, with an 11.1% higher preference among men (p=0.002).

The total number of games mentioned as examples of a video game they enjoy playing has gathered a total of 337 responses (Figure 4). This figure groups franchises to facilitate data interpretation. Thus, all releases of games such as GTA or Legend of Zelda are included as a single item. Prominent are the major high-budget franchises with high production values, known as "AAA" games, such as FIFA, Fortnite, GTA, or Call of Duty. There are few mentions of indie games, and the genres of the games align with the selection trends previously mentioned.

Hogwarts Legacy The Wischest Parch (Seed for Speed Policy Country Coun

Figure 4. Word cloud of games that exemplify what is liked in a video game.

Source: Own elaboration, 2025.

The games most mentioned by men also tend to appear among the preferences of women, but the reverse is not true (Table 7). The two titles preferred by women (Animal Crossing and The Sims) do not feature among the games most mentioned by men. To find them in their list of preferences, one must go down to positions 78 and 26, with only 0.4% and 1.7% of mentions, respectively. However, five of the games preferred by men (Fortnite, GTA, Call of Duty, Minecraft, and Super Mario) are indeed found in the list of the top 10 preferred by women.

Table 7. The 10 most mentioned games as examples of what they like by sex (%)

Men	8	Women			
Fifa / EA FC 24	29,5%	Animal Crossing	18,2%		
Fortnite	21,4%	The Sims	13,3%		
GTA (Grand Theft Auto)	17,9%	Super Mario	12,1%		
Call of Duty	16,7%	Mario Kart	11,7%		
Brawl Stars	14,5%	Fortnite	10,2%		
Minecraft	11,5%	GTA (Grand Theft Auto)	8,3%		
God of War	8,1%	The Legend of Zelda	8,3%		
Assassin's Creed	6,4%	Call of Duty	8,0%		
Super Mario	6,0%	Candy Crush	7,6%		
The Last Of Us	5,6%	Minecraft	6,4%		

Source: Own elaboration, 2025.

3.4. Perception of Skill as a Player

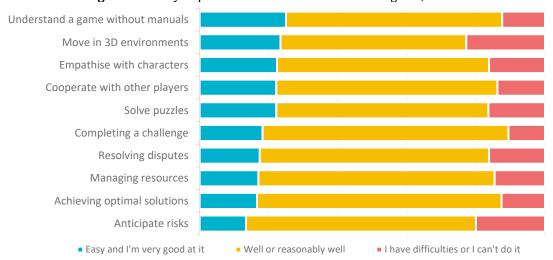
In this section of the survey, players were asked about their perception of their ability to perform different tasks within games. The general results can be found in Table 8.

Table 8. Ability to perform different tasks in a video game, by sex (%)

1 able 0.	Ability to periorili un				
	I can't do this kind	I have some	I am reasonably	I am good	I find it easy and I
Total	of thing at all	difficulties	good at it	at it	am very good at it
Understand a game without manuals	1.20%	11.20%	32.20%	30.40%	25.00%
Moving in 3D environments	4.60%	18.20%	27.40%	26.40%	23.40%
Completing a challenge	1.80%	8.80%	38.60%	32.60%	18.20%
Manage resources	2.00%	12.60%	34.40%	34.00%	17.00%
Anticipate risks	2.40%	17.60%	30.80%	35.80%	13.40%
Solve puzzles	3.00%	13.40%	31.80%	29.60%	22.20%
Achieving optimal solutions	0.80%	11.80%	33.60%	37.20%	16.60%
Empathise with the characters	3.20%	13.00%	30.40%	31.00%	22.40%
Cooperate with other players	3.00%	10.80%	34.00%	30.00%	22.20%
Resolving disputes	2.20%	14.00%	33.40%	33.00%	17.40%
Average	2.42%	13.14%	32.66%	32.00%	19.78%

Source: Own elaboration, 2025.

Figure 5. Ability to perform different tasks in a video game, totals.



Source: Own elaboration, 2025.

The percentage of players who do not consider themselves qualified to perform the proposed activities is consistently low, with an average of 2.62% and a maximum value of 4.65% for the activity related to movement in 3D environments. The activity with the lowest percentage of inadequacy was "Achieving optimal solutions," with 0.86%.

On average, 51.38% placed themselves in the highest skill category. Notably, "understanding a game without manuals" stands out with 55.40% of responses. The lowest value is for "anticipating risks" with 49.20% of responses. "Moving in 3D environments," the activity where the greatest number of people indicated they had difficulties, is the second highest in terms of the percentage of players who consider themselves skilled at it.

Sex is a differentiating factor in most cases (Table 9).

Table 9. Ability for different tasks in a video game by sex (%).

		Men			Women		
	I have difficulties or cannot do it	Good or reasonably good	Easy and I am very good at it	I have difficulty or cannot do it	Good or reasonably good	Easy and I am very good at it	p
Understand a game without manuals	8,97%	56,41%	34,62%	15,53%	68,18%	16,29%	<,001
Moving in 3D environments	10,26%	52,14%	37,61%	34,09%	54,92%	10,98%	<,001
Completing a challenge	8,97%	64,10%	26,92%	11,74%	77,65%	10,61%	<,001
Manage resources	14,96%	61,11%	23,93%	14,39%	74,62%	10,98%	0,126
Anticipate risks	13,68%	66,24%	20,09%	25,76%	66,67%	7,58%	<0,001
Solve puzzles	19,66%	57,26%	23,08%	13,64%	64,77%	21,59%	0,357
Achieving optimal solutions	10,26%	65,81%	23,93%	14,77%	75,00%	10,23%	<,001
Empathise with the characters	15,81%	57,69%	26,50%	16,29%	64,77%	18,94%	0,43
Cooperate with other players	14,96%	57,26%	27,78%	12,12%	70,45%	17,42%	0,196
Resolving disputes	15,38%	61,97%	22,65%	17,05%	70,08%	12,88%	0,009
Average	13,29%	60,00%	26,71%	17,54%	68,71%	13,75%	

Source: Own elaboration, 2025.

If we observe the mean values, there is a much greater number of women who do not consider themselves skilled in the proposed activities, with 17.54% of women and 13.29% of men, which represents an increase of 32% among women. There is also a significantly lower number of women who consider themselves highly skilled, only 13.75% compared to 26.71% of men, which is a decrease of 49%. No significant differences are found in managing resources (p=0.13), solving puzzles (p=0.26), empathising with characters (p=0.43), and cooperating with other players (p=0.20). Significant differences are observed in the remaining six items.

The greatest difference is seen in movement in 3D spaces, where the percentage rises from 10.26% of men to 34.09% of women (+232.39%). In second place, we find anticipating risks, with 13.68% of men and 25.76% of women (+88.25% among women), followed by understanding a game without manuals. In this case, we find 8.97% of men and 15.53% of women (+73.05% among women). The smallest difference is in resolving disputes, where 17.05% of women do not consider themselves capable compared to 15.38% of men (+10.80%). However, only 12.88% of women consider themselves highly capable compared to 22.65% of men (-48.52%).

4. Discussion

The data from this study indicate that there are differences in gaming preferences and habits according to sex. In terms of game preferences, it has been observed that women tend to lean towards solo games, whereas men, on the other hand, show a clear preference for online multiplayer video games. As seen from the results, the trend towards solo play is more pronounced among women (69.8%) than among men (48.9%). This difference could be partly related to the social dynamics of the gaming community and the constant criticism that women face when participating in activities considered traditionally "masculine" (Bègue et al., 2017; Mahrani et al., 2024; Ruvalcaba et al., 2018). Playing solo or choosing casual video games provides many women with a more relaxed experience away from social evaluation, thus allowing them to enjoy it as a moment for entertainment and disconnection. On the other hand, although MMOs are increasingly including more female players, they are still perceived as male spaces, reflecting their origins in a male-dominated design, where men feel strong and therefore tend to criticise female players who enter that world more harshly.

A key aspect influencing women's relationship with video games is the limited social interaction found in many single-player games. According to Hartmann and Klimmt (2006), the majority of these video games adopt structures similar to action films or sports broadcasts, where social interaction

among players is secondary. However, there are some notable exceptions that have succeeded in attracting a female audience, such as The Sims (Electronic Arts, 2000), which places special emphasis on social relationships both among characters and between players. This focus on social interaction has been well received by female players, leading to the game becoming a successful and popular title within the female community (Steen et al., 2006). There are also other examples following this trend, such as Animal Crossing: New Horizons (Nintendo, 2020), which focuses on social interaction and collaboration within the community of players. Nevertheless, this type of proposal is relatively scarce, and the majority of single-player video games continue to offer few opportunities for characters to develop relationships with one another. This limitation represents a barrier to attracting a broader female audience.

This information complements and reinforces the fact that the online multiplayer option is much more popular among men (55.7%) than among women (32.1%). This aligns with previous studies suggesting that men are more inclined to engage in competitive and collaborative online games (Brown et al., 1997; Demirbilek & Uysal, 2024; Kivikangas, 2014). No significant differences have been observed in the remaining play modes.

Regarding the relationship of players with the time they dedicate to video games, it has been observed that men may be more prone to developing gaming addiction. This is reflected in a greater number of hours played, more gaming sessions, a higher gaming frequency, and, additionally, a greater number of responses indicating they play "whenever they can." In contrast, women seem to have a lower tolerance for frustration and fewer opportunities to dedicate time to this entertainment medium, which motivates them to stop playing when they fail to achieve the game's objectives or due to other tasks they need to address. This fact could be linked to a lower overall perception of their skills as players, as they perceive themselves as worse players due to not practising the same amount of time as men.

In some genres, there appears to be a separation between "masculine" and "feminine" games, which could also include the type of interaction and, perhaps, the difficulty. There are significant differences at least in the choice of FPS/action and sports games, which are preferred by men. In contrast, simulation, social games, and puzzles are the genres that women tend to choose to play.

This point is perhaps particularly striking, as it might be assumed that there is a clear division between men and women in the selection of video games, such that men play certain games and women play others. However, the results diverge from this assumption. Certainly, men select games from the genres that might be expected, such as action and FPS games, and do not opt for those identified as "feminine." However, women do invest time in playing those traditionally masculine games. This is exemplified in the selection of specific games, such as GTA, Call of Duty, or Fortnite. Men do not prioritise the video games selected by women, such as The Sims or Animal Crossing. We could consider that there is interest from female players in participating in the predominantly masculine gaming culture through the selection of high-impact games, even though they are more oriented towards men, but there is no equivalent interest from men in the opposite direction. In such a way that masculine games can enjoy both audiences, while those labelled as "feminine" become a niche only for them

5. Conclusions

This study has enabled the identification of significant differences in gaming habits, preferences, and skill perception in video games according to sex among young adults. The results have confirmed that men and women exhibit distinct patterns across multiple aspects of video game consumption.

Regarding gaming habits, men tend to engage in gaming sessions with greater frequency, longer durations, and more extensive use of platforms such as consoles and PCs. Women, on the other hand, prefer shorter sessions and predominantly use mobile devices or tablet-type devices. Furthermore, women favour solo play, whereas men are more inclined towards online multiplayer experiences. This could be linked to the perception women have of not fitting into the community or not being well received within it. This could be connected to a sense of lack of belonging to the gaming community, competitiveness, and the reception of women in a male-dominated environment.

With respect to video game genres, distinct patterns are observed: women prefer social games, simulation, and puzzles, while men show an inclination towards FPS, action, and sports games. This suggests that game mechanics and interaction styles influence the attraction to certain genres, in addition to possible social and cultural factors that reinforce these patterns.

Finally, in the perception of skill as a player, men display greater confidence in their abilities across nearly all evaluated dimensions, particularly in motor and strategic skills. In contrast, women tend to assess their performance more modestly, which could be related to less exposure to more demanding video games, the shorter time they spend playing, or the persistence of stereotypes about women within the gaming community that lead them to question their own worth.

These findings highlight the different dynamics linked to the sex of players currently observed among young adults in the consumption of cultural products from the video game industry. These results reveal shortcomings not only in terms of participation but also in the design of more inclusive and representative experiences. Developing strategies to address these gaps would help women find more engaging products within the video game industry. Further exploration into how social and cultural factors affect the self-assessment of skills and participation in specific video game genres would be warranted.

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