

RAE-IC, Revista de la Asociación Española de
Investigación de la Comunicación

ISSN 2341-2690

DOI: <https://doi.org/10.24137/raeic.12.24.07>



Recibido el 10 de febrero de 2025

Aceptado el 21 de octubre de 2025

Publicado el 4 de noviembre de 2025

How do digital natives play? Nuances of the gender and generation gap between Millenials and Z in video games

¿Cómo juegan los nativos digitales? Matices de la brecha de género y generacional entre Millenials y Z en los videojuegos

Ruiz-Poveda Vera, Cristina

Universidad Complutense de Madrid (UCM)

cruizpov@ucm.es



Jiménez Peláez, Jose María

Universidad Nebrija (NEBRIJA)

jjimenezpe@nebrija.es



Rubio Romero, Juana

Universidad Nebrija (NEBRIJA)

jrubio@nebrija.es



Forma de citar este artículo:

Ruiz-Poveda Vera, C., Jiménez Peláez, J. M., & Rubio Romero, J. (2025). How do digital natives play? Nuances of the gender and generation gap between Millenials and Z in video games. *RAE-IC, Revista de la Asociación Española de Investigación de la Comunicación*, 12(24), raeic122407. <https://doi.org/10.24137/raeic.12.24.07>

Abstract:

Video games have become an enormously popular cultural and entertainment practice among young people. The main objective of this paper is to analyze the relationship of Millennials and Generation Z with video games and to explore gender differences in their gaming practices. To achieve this, methodological triangulation combining surveys and discussion groups was used, allowing a descriptive and in-depth analysis of their gaming habits and preferences. The main conclusions reveal that digital natives of Generation Z begin to play at an earlier age than Millennials, with a prominent role of the family in their initiation. Generational openness to video games is growing gradually, with Centennial girls defying gender stereotypes regarding their preferences of video game genres and appreciating other women gamers as role models. This study elucidates the changing relationship of digital natives with video games. Boys spend more time gaming than girls, Generation Z girls are playing more and more frequently than Millennials, and gender stereotypes related to types of games are fading.

Keywords: gaming habits; Millennials; Generation Z; Gender stereotypes; Gender gap; methodological triangulation

Resumen:

Los videojuegos se han convertido en una forma de entretenimiento y consumo cultural muy popular entre los jóvenes. El objetivo principal de este trabajo es analizar la relación con los videojuegos de las generaciones Milenial y Z y explorar las diferencias de género en sus prácticas de juego. Para lograrlo se emplea una metodología triangular que combina encuestas y grupos de discusión, permitiendo un análisis descriptivo y en profundidad de sus hábitos y experiencias de juego. Las principales conclusiones revelan que los nativos digitales de la Generación Z comienzan a jugar a una edad más temprana que los Millennials, con un papel destacado de la familia en su iniciación. La apertura generacional hacia los videojuegos aumenta, y las mujeres Z desafían los estereotipos de género con sus preferencias de juego y valorando cada vez más a otras videojugadoras como figuras de referencia. Este estudio arroja luz sobre la cambiante relación de los nativos digitales con los videojuegos y, si bien los chicos dedican más

tiempo al juego que las chicas, las de la Generación Z juegan más tiempo y más frecuentemente que las Millennials, al mismo tiempo que se desvanecen los estereotipos de género relacionados con tipos de juegos.

Palabras clave: hábitos de videojuegos; Millennials; Generación Z; Estereotipos de género; Brecha de género; Metodología triangular

1. INTRODUCTION

Video games are increasingly becoming part of the spare time of young people. In Spain, 77% of young people between 15-20 years of age claim to have played video games recently and only 3.7% of this sample have never used them (Fundación Fad Juventud, 2023). The notion that video games are reserved for young, sedentary boys with little social life or belonging to a marginal subculture (Jaramillo & Saldaña, 2023; Engelstätter & Ward, 2022) is now obsolete. While academic literature has been challenging stereotypes about video game players for years (Morgenroth et al., 2020; Chess et al., 2017; among others), the recent rise in their popularity is particularly significant. Video games are increasingly attracting diverse demographic profiles in terms of ages, socioeconomic levels, genders and races (Engelstätter & Ward, 2022). In fact, children have been accessing video games earlier during the last years and this type of entertainment is now part of the routine of most enfants (Olson, 2010).

The term “digital natives” (Prensky, 2001) helps us to understand this increase in popularity. In spite of its limitations (Spiegel, 2021; Pires et al., 2019; Helsper & Eynon, 2010), the idea of digital natives is useful to understand the consumption of digital media among Millennial and Z generations, born between 1981-1996 and between 1997-2012 respectively. Since Henry Jenkins started the conversation about participatory culture (2006), digital media have been gradually increasing the possibilities for interaction, something to which digital natives are used. In the midst of participatory culture and media convergence (Jenkins, 2006), digital media users become “producers” (Guerrero-Pico et al., 2019) or “prosumers” (Toffler, 1980), turning into an active audience and even content creators. Consequently, digital media are

perceived positively by Generation Z compared to traditional media because they allow more interaction with the public sphere and facilitate the democratization of discourses on the Internet (Pérez-Escoda & Pedrero-Esteban, 2021). In short, young people prefer more interactive media to traditional media (Pérez-Escoda et al., 2021), a predisposition that entices video game use among these generational groups. In fact, in Spain, Millennials and Centennials constitute the majority of the total number of gamers and the percentages of them between 6 and 14 years of age are rising (Asociación Española del Videojuego, 2024).

In addition to this predisposition towards interactive media, it is worth inquiring how children and young adults access the world of video games and how their environment contributes to their initiation. There is little research focused specifically on Millennials' and Zs' access to video games, but studies point to the crucial role of the family to the extent that the games themselves and even the devices are often designed to facilitate a family experience (Wang, 2018, p. 2). Traditionally, families have operated as a protective filter, as the negative effects of video games on children and adolescents received special attention in the media and academia for many years (Olson 2010, p. 1). However, in recent years there has been an increased awareness of the benefits of video games in children and teenagers to learn, to build personal relationships, and to create a sense of belonging (Chicharro Merayo, 2014a, p. 89), among others. In this sense, the adult caretakers are no longer only guardians, as they are also playmates (Nikken and Jansz, 2006). Siblings are also often children's first playmates. Older brothers or sisters are often the ones who introduce younger children to video games (Go et al., 2012, p. 740). It has been observed that when families play together, bonds benefit from this shared experience (Wang 2018, p. 4), especially in the case of girls (Coyne et al., 2011). Indeed, during the social distancing restrictions due to the COVID-19 pandemic, family play increased and became a coping mechanism to deal with the high levels of stress and isolation (Pearce et al. 2022; Pires et al., 2020). Ultimately, the family environment positively influences children's interest in video games.

Furthermore, to understand Millennials and Zs video gamers it behooves to know their practices, mainly constituted by their preferences, time usage, and types of games

(Kowert et al., 2014). In this sense, the fragmentation of audiences characteristic of digital media is an important factor in the uses that young people make of video games, as well as the theory of uses and gratifications, as they take an active role in their relationship with video games and use them to satisfy different needs, such as socialization or entertainment, depending on the narrative genre, game mode, and other variables. Although video games initially offered little variety, there is now an infinite number of genres, devices or playing dynamics according to the tastes and needs of each user. In fact, the percentages of preferences among video gamers' favorite types of games are almost evenly distributed among the great variety of typologies, such as puzzles, shooters, sports games, arcade games, or simulation games, among many others (Entertainment Software Association, 2023). Likewise, Gómez-García et. al (2017, p. 57) state in a study that the diversity of titles played by the interviewed subjects was so wide that they were hardly repeated and that they were part of all kinds of different categories, such as those based on popular board games, platformers, or turn-based strategy, among others. There are more and more opportunities to play without being a specialized video game user, as is the case with "casual games" and games for smartphones, which facilitate the accessibility of the medium.

Regarding gaming habits, the taxonomy of gamer types developed by Richard Bartle in 1990 is still very influential nowadays. He distinguished among four types according to game objectives: the killer (more competitive), the achiever (motivated by game objectives), the socializer (interacting with other players through game culture), and the explorer (eager to learn more about the game's diegesis and dynamics). In a more nuanced and current version, the video game analysis company Newzoo distinguishes between nine types of profiles based on their preferences, types of game, and devices of use. Simply put, these are the ultimate gamer, the generalist enthusiast, the bargain hunter, the community gamer, the device enthusiast, the gamer who enjoys watching streamers more than playing, those who used to play and now only have time to watch others play, those who play little and use video games to fill their free time (usually on mobile), and former gamers who no longer play or watch games, but might pick up the habit (Newzoo, 2021). Some of these categories strongly overlap with certain age groups, such as those who no longer ever play, who are mostly people between 51-65

years of age. Significantly, however, Millennials and Zs are fairly evenly distributed across all categories (around 10-15%), highlighting the diversity of profiles within these two generations of gamers (Newzoo, 2021).

Variables such as gender or social context influence young people's gaming habits, as well as their understanding of the world of video games and their aspirations in relation to them (Vilasís-Pamos & Pires, 2022). For example, if the video game is used in an educational context, young people tend to conceptualize it as beneficial for their learning, skills and creativity (Gomez-García et al., 2017). In their study mapping the cultural practices and imaginaries of video gamers between 12 and 16 years of age belonging to Generation Z, Vilasís-Pamos and Pires (2022, p. 7) distinguish between five categories of gamers according to the adolescents' own definitions: escapist gamer, embarrassed gamer, celebrity gamer, professional gamer, and poser gamer. Adolescents' relationships with these categories vary greatly depending on gender and their socioeconomic reality. The same occurs with the relationship with the devices and the frequency of gaming. For example, in Spain the difference in gaming time and device preference is very marked depending on gender and age (Asociación Española del Videojuego, 2022). Consoles are the preferred device for men, PCs are more used by women, and smartphones are very popular among both genders (Asociación Española del Videojuego, 2024). In terms of age, teenagers prefer consoles, smartphones and tablets, while they use portable consoles very little (Asociación Española del Videojuego, 2024).

Regarding differences based on gender, women already make up half of all video gamers, accounting for 50,45% in Spain (Asociación Española del Videojuego, 2024) and 46% in other Western countries such as the United States (Entertainment Software Association, 2024). Moreover, these percentages are evenly distributed in each age range, with both genders being practically equal in each age stage. Nevertheless, some of the initial attributes of the stereotypical man gamer remain. In many respects, video games are still perceived as an environment for men (Tomkinson, 2015). Additionally, a broader problem influences this issue: the gender-based digital divide (Masanet et. al, 2021). Despite efforts to promote gender equality in relation to digital literacy (Tyers-Chowdhury and Binder, 2021; Gebhardt et. al, 2019; Ertl and Helling, 2011) and although

statistics are improving, the gender gap with respect to digital literacy has not yet closed (Punter et. al., 2017).

While this gap has to do in part with adolescents' access to digital technologies broadly, the difference in gaming device usage habits between boys and girls stands out above all (Masanet et al., 2021). Despite the number of girl players, gaming habits show differences by gender. Mar Chicharro Merayo (2014b) states that, according to their preferences and gaming habits, girl gamers tend to fit more into Bartle's (1990) aforementioned categories as socializers and explorers, and not so much as killers or getters, coinciding with traditional gender roles. Along these lines, the author claims that girl gamers are more inclined to play cooperative games than competitive ones. It is also observed that men play more frequently than women and, except with PCs, they dedicate more time per week to video games (Asociación Española del Videojuego, 2022). In general, video games continue to be a mostly men-dominated medium among young people (Masanet et. al., 2021) but it is necessary to examine the nuances and different tendencies of men and women in detail regarding their gaming habits and preferences.

This paper focuses on the initiation into video games and on gaming behaviors and habits of Millennials and Generation Z. While there are many studies on categories of gamers, motivations, and gaming habits of young people, there is no literature that establishes a comparative by generation between digital natives. This paper is part of a larger study that further analyzes preferences, forms of socialization around games, and communities of video gamers not only in Millennial and Z generations but in a broader demographic sample. The objectives of this article are:

- **O1:** To understand how digital natives start playing video games in Spain.
- **O2:** To know their behaviors, preferences and gaming habits.
- **O3:** To examine the differences between Millennials and Zs and between boy and girl gamers.
- **O4:** To delve into the specifics of the gender gap in video games among young people.

2. METHODOLOGY

We employed methodological triangulation, combining qualitative and quantitative methods. This approach provides a more holistic and complete vision as this methodology allows us to observe the studied phenomenon both from the reality of the subjects (qualitative paradigm - inductive perspective), and from the reality designed by the researchers in the questionnaire (quantitative paradigm - deductive perspective) from the qualitative results. As Arias Valencia (2000) indicates, the main purpose of qualitative-quantitative triangulation is to obtain different but complementary data on the same research object.

This methodology was carried out in two phases: the qualitative phase (first phase) served as a basis for the design of the quantitative questionnaire (second phase). The qualitative phase allowed us to explore the experiences and gaming habits of video gamers in depth, which was the basis on which the quantitative survey was designed. The quantitative phase provided us with objective, numerical data which are more easily generalizable and representative of the study sample population. As Eslava (2014, p. 113) points out, “The information captured by a piece of data must be framed in a theoretical context of hypotheses subject to confirmation and in an evaluative context of assertions subject to validation”.

As for the research tools, for the qualitative phase we employed the discussion group technique. This method has helped us understand the social meaning of our object of study, given the tendency toward consensus that this technique entails. As noted by Gerardo León (2007) following Jesús Ibáñez: “the product of the group is information that speaks about and from the social context [...] The group discourse generated in the micro group (discussion group) is a constituent of the social structure of the macro group (society)” (p. n/p).

Regarding the technique for the quantitative phase of the study, a structured questionnaire divided into four thematic blocks was designed, including:

- Sociodemographic data.
- Initiation and gaming habits.

- Preferences and motivations.
- Video game communities and socialization.

The discussion outline was designed based on the following topics:

- Habits and motivations to play video games.
- Gaming, interaction and socialization.
- Video game communities.

In this article, we focus on the qualitative and quantitative results regarding video gaming habits, which were explored qualitatively from two perspectives:

- Ways of playing: devices, playmates, differences between playing on a video console or online, differences between boys and girls playing styles (stereotypes)...
- Types of games they play the most and the main platforms they use to play online.

Regarding the quantitative part, in this article we present the results related to the first two sections of the questionnaire, which cover the following topics:

- Initiation into video games and ways of playing.
- Gaming devices.
- Preferred types and genres of video games.
- Time and frequency of play.
- Other gaming habits.

The selection of participants for the qualitative sample was done for convenience: the study participants are university and high school students. These subjects were selected because of their age, as they belong to Generation Z. These were the selection criteria for the qualitative sample:

- Age: young people between 16 and 23 years old.
- Gender: all genders were considered.
- Use of video games: all the participants were usual video game players.

The qualitative sample consisted of a total of 28 participants: 12 girls and 16 boys, who were interviewed in discussion groups according to the following distribution:

Table 1. Distribution of the qualitative discussion groups

	University students	High school students
Boys	DG1 (8 participants)	DG3 (8 participants)
Girls	DG2 (6 participants) DG4 (6 participants)	

Source: Based on authors' data

A total of four discussion groups (DG) were conducted, with boys and girls separated, given the possible differences regarding how they relate to video games and talk about them. Initially, a discussion group of girl video game players who were high school students was planned, but we encountered severe difficulties in recruitment. Thus, this group had to be cancelled, constituting one of the limitations of this study. However, the level of saturation reached in the discussions of the other groups allowed us to delimit the qualitative sample with sufficient data.

The quantitative sample was determined by a series of initial questions on the same sociodemographic variables as the qualitative sample (age, gender and gaming habits) in the online questionnaire (Google Forms). The questionnaire included a “non-binary/other” response option for the question about gender, but only two people selected it, so these results were eliminated as they were not statistically representative in comparison with the total number of responses.

The total sample of the complete quantitative study is of 1,723 valid questionnaires. Of this total, the sample of digital native generations (Millennial and Z) on which this work is based is almost 80%: 1,364 questionnaires answered, whose distribution is reflected in Table 2.

Table 2. Distribution of the questionnaires by generation and gender

	Number of total questionnaires	% Total	% Men	% Women

Millennials	815	59.7%	93.6% (MM)	6.4% (MW)
Generation Z	549	31.8%	75.2% (ZM)	24.8% (ZW)
TOTAL - Digital Natives	1,364			

Source: Based on authors' data

Before launching it, the online questionnaire was tested in person with 15 subjects in order to detect its proper functioning and comprehension. The appropriate rectifications were implemented. Finally, the questionnaire was done online through the platform Google Forms. It was uploaded to this platform on May 7, 2022 and was available until October 17, 2022, when it was closed.

As for the analysis of the qualitative information, it was transcribed and analyzed to extract the structural parameters of the discourse produced according to the research objectives. A descriptive and multivariate analysis was used to process the quantitative data. The Microsoft Excel program was used to calculate the p-value and verify the significance of the data, eliminate outliers and ensure the consistency of the data, as well as to organize the results and present them in tables and figures to facilitate the interpretation and communication of the findings.

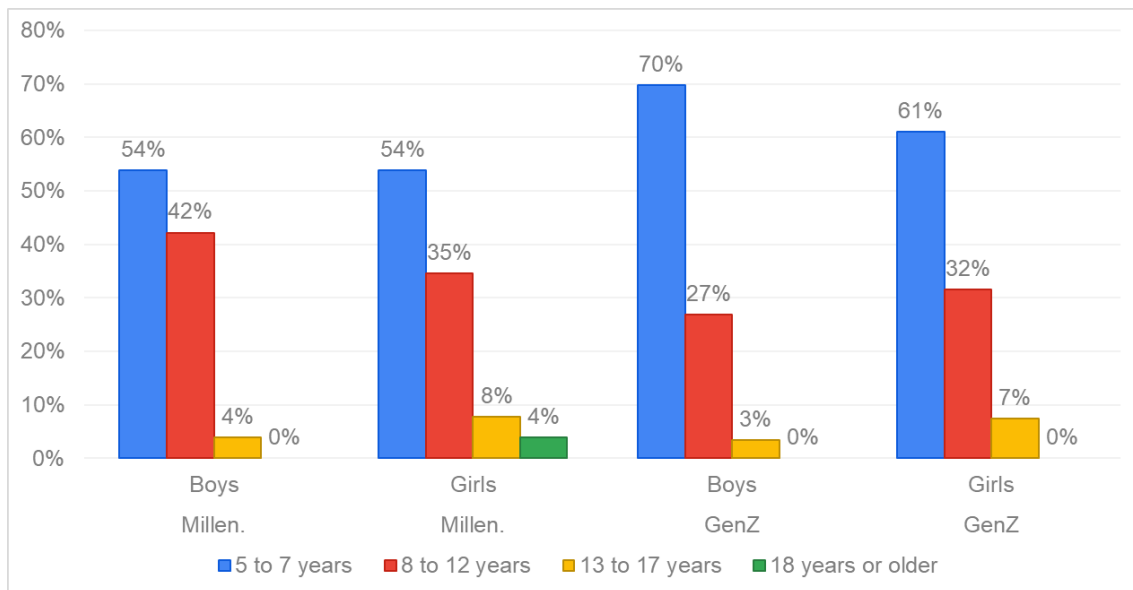
Thus, in this article we aim to answer the following questions: How do digital natives start playing video games? Are there differences based on gender? Do both of the involved generations have similar gaming habits and preferences? Who influences their initiation? Which gaming devices do they prefer to play? What type of games and genres do they like? How much time do they usually dedicate to them? Is there a correlation between type of game and time spent playing?

3. RESULTS

3.1. INITIATION INTO VIDEO GAMES

Initiation into video games represents a crucial point in individuals with this form of entertainment and can shape gaming habits and preferences throughout life.

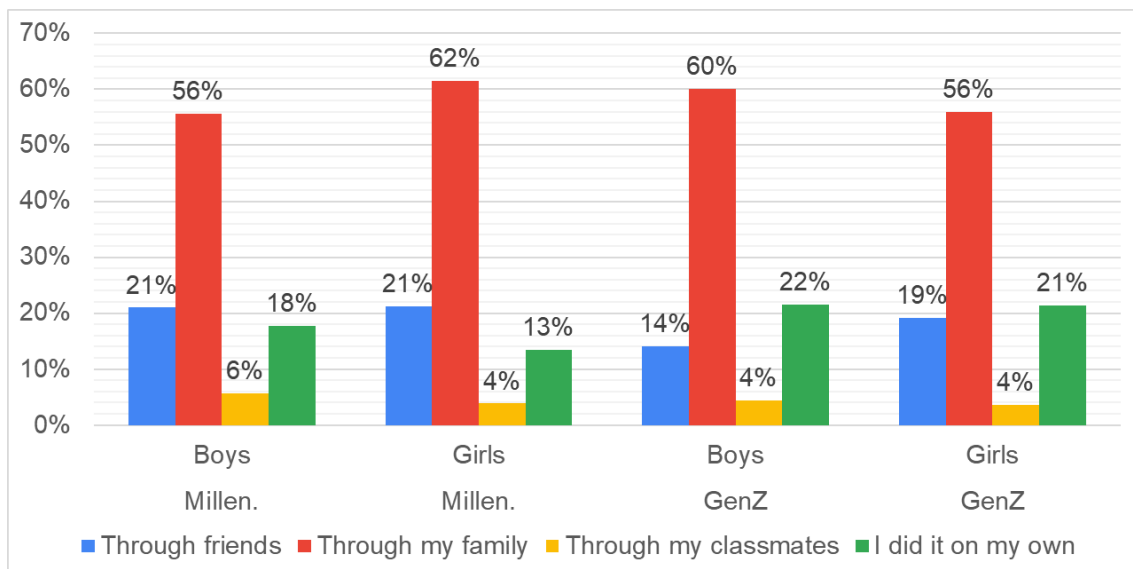
Figure 1. Age of Initiation into Video Games



Source: Based on authors' data

The data obtained (Figure 1) through the questionnaire show that digital natives, both boys and girls, are starting at an increasingly younger ages. Most respondents from both generations began playing before the age of eight: 54% boys and 42% girls. Virtually none of the young people interviewed started after reaching adulthood or during adolescence.

Figure 2. How gamers get into video games



Source: Based on authors' data

Regarding the people who influenced their decision to start playing video games, the results (Figure 2) reveal that family was key for both generations regardless of gender.

Yet a small difference is observed in terms of gender: it increases slightly in boys and decreases in girls of Generation Z, which could indicate a trend.

For Millennials, their friends played a significant role in their introduction to this medium. However, for Generation Z the influence of friends diminishes and their autonomous initiation becomes more relevant.

Some differences between Millennials and Zs also stand out when referring to the influence that their parents being video game fans might have had on their initiation. More than 90% of Millennials and more than 80% of Zs claim that their parents were not video game fans, although there is a slightly greater influence among girls of both generations whose parents are video gamer players. This becomes more evident through the chi-square and p-value tests. They yield similar results in terms of the significance of the data obtained, but they show that the initiation to video gaming depends on the generation ($p = 7.96 \times 10^{-70}$) but even more on gender ($p = 8.33 \times 10^{-184}$), suggesting a stronger association with gender than with generation.

To better understand the role of the family in the initiation into video games, we inquired whether the respondents who admitted the influence of their adult relatives usually played with them. The data reveal that more than half of the respondents (63%) do not usually play with their adult role models, but that a considerable percentage (37%) of the studied population does share this intergenerational gaming experience, mainly Millennials girls (38%) and Generation Z boys (41%).

The discussion groups confirm the importance of families in the initiation, either through the purchase of gaming devices (gifts from relatives), or through shared play with adults of reference. Among the Centennial girls, one claims that she “started out because [her] grandmother bought the Nintendo DS for [her] brother and [her] and [her] aunt would hack [them] video games”, showing the importance of the family in access to video game technologies. Similar to the data obtained through the questionnaire, the discussion groups indicate that the Generation Z girls show a greater influence of their parents, who are often gamers, as well as their brothers and boy cousins. One of the subjects explains that she overcame the anxiety of starting playing video games because she

“trusted her cousin, who is like an older brother for [her]... and who became [her] initiator and [her] guide” in this world. Another one explains that she “would see [her] brother having a lot of fun playing video games and then decided to start playing with his friends”.

In the discussion groups, Generation Z girls mentioned that, although they hardly knew other video-gaming girls growing up, it was important for them to have girl and women role models who were fond of the medium because otherwise they felt slightly lonely as gamers.

3.2. GAMING BEHAVIORS AND HABITS

3.2.1. *Playing devices*

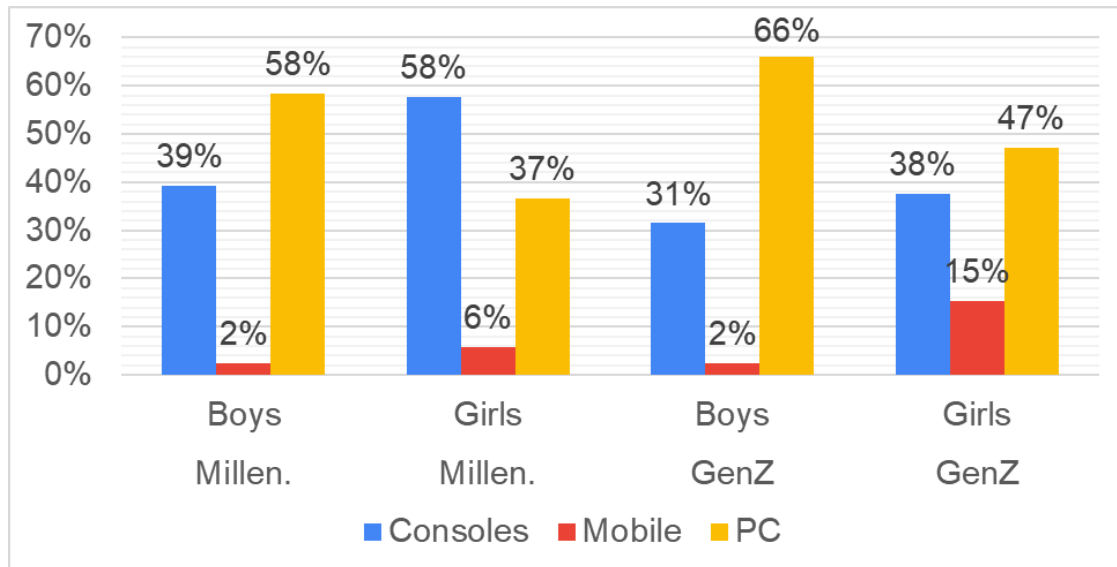
Once initiated as gamers, the choice of device remains relevant. The questionnaire indicates notable differences between generations and genders in this regard. While both generations show a clear preference for the PC, it is Generation Z and boy gamers who are more inclined towards this trend, as shown in Figure 3. The tendency that is significantly observed among the girls of these two generations stands out: more than half of the Millennial girls prefer consoles and almost half of the Centennial girls prefer the computer.

Mobile phones stand out as a gaming device only among Centennial girls, but only with 15%, a significantly lower percentage than the rest of the groups.

The discussion groups conducted with members of Generation Z express that physical access to gaming devices was key in their initiation into video games, either through gifts or through friends and family sharing their consoles in their respective homes. That said, some differences were noted. For boys, the device is especially important, partly because of the games that are available on each of them and partly also because of an element of status or maturity: while in childhood they valued the PlayStation more, the transition to the computer is associated with a sort of rite of passage to adulthood, perhaps because of the economic investment required for a powerful computer, also associated with the start of their university life. Girls say that, in their childhood, the PlayStation was more sought after than other gaming devices and was considered “more

for boys” than the Nintendo. In their case, it was common to play with the PlayStation that had been given to their brothers.

Figure 3. Preferred device for gaming



Source: Based on authors' data

The discussion groups also confirm the importance of the PC for Generation Z, as all the groups interviewed use it to a certain extent. However, there are significant differences according to the level of experience of the players and gender. Most of the university students play online on PC, but they also keep their consoles. In contrast, high school boys hardly give any importance to consoles and play more on computers, which seems to be a device already accessible to them because of their studies and which allows them a higher level of online sociability. In the girls' groups, the more experienced gamers make much use of the PC and the possibilities of interaction it offers.

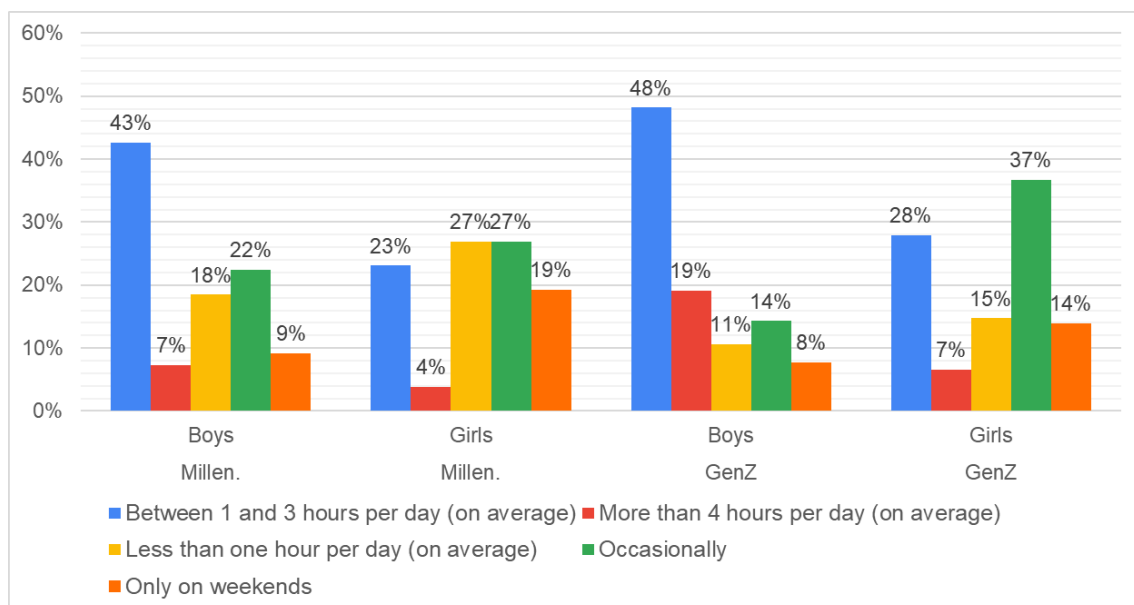
In addition, they all share the idea that playing on mobile phones or tablets is “less serious” than on PCs or consoles. Less experienced girl gamers play a lot of casual games on tablets or mobile phones, in a more relaxed way and without the ambition to improve their abilities within the game. Boys, although they play quite a lot on mobile phones, hardly mention it on their discourses because they find it “sillier” than the rest of the options. We can deduce that, due to their generational traits, gaming on this device is quite naturalized.

3.2.2. Playing time and preferred video game genres

The time spent playing is closely related to the type of video game involved. The data indicate that boys of both generations play significantly longer periods of time than girls. More than 40% of boys of both generations tend to play for 1 to 3 hours per day on average, and it is the Zs who are the most intensive players (19%, compared to 7% of Millennial boys).

Girls are overall more occasional gamers. Millennial girls show more balanced data in terms of their gaming time, with only 4% dedicating more than 4 hours per day on average; they are also the ones who spend less than 20% of their weekends on this activity. Generation Z women dedicate more time than Millennial women to this activity and are more intensive (7% vs. 4%), although almost 40% opt for occasional gaming. The discussion groups confirmed this trend, as girls reported to play often but more casually while their brothers had a more “obsessive relationship” with the game at hand, dedicating it more time.

Figure 4. Time spent playing (response to “How much do you play?”)



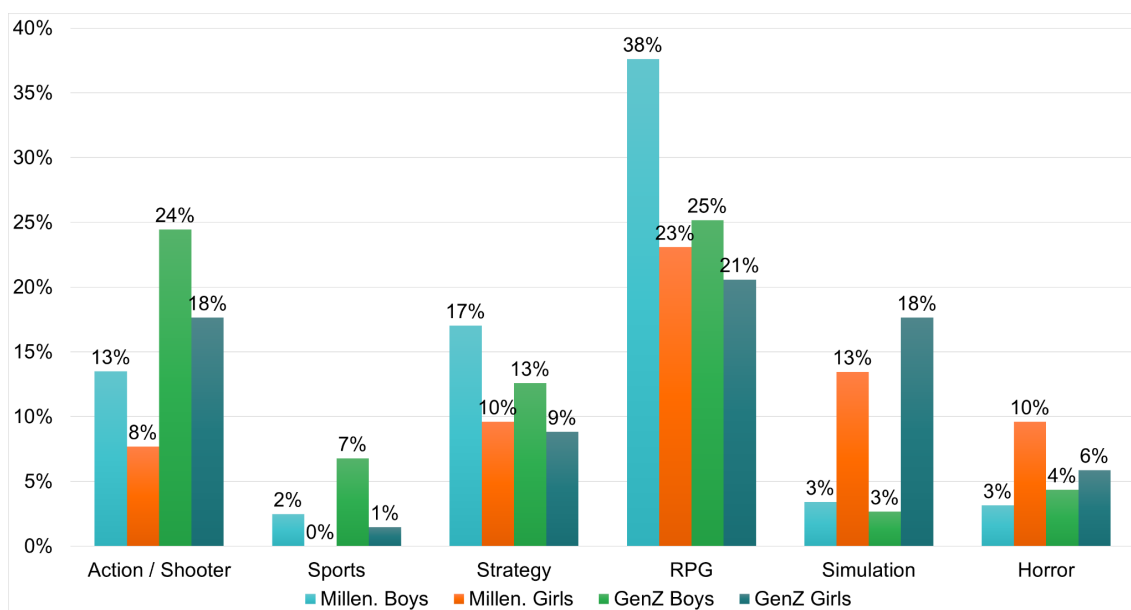
Source: Based on authors' data

Regarding genres (Figure 5), RPGs (role-playing games) are undoubtedly preferred by all digital native gamers, followed by strategy games. Among boys, action/shooter games are particularly popular, especially within Generation Z (24%). However, Generation Z girls show an increased interest in action/shooter games (18%) with respect to

Millennial women (13%). Overall, women of both generations tend to show a more diversified preference for different genres. The discussion groups confirm this trend, as both groups of girl gamers showed interest in a variety of different games depending on their mood and motivations for playing. Despite their fame, sports video games are comparatively unpopular among all the groups studied.

The discussion groups show nuances with regard to the questionnaire, especially about how Centennials talk about genres. Centennial boys discuss their preference of action/shooter games such as Grand Theft Auto and God of War, as well as for sports videogames such as FIFA. Other genres seem less popular in their discourse, such as simulation, with games like Animal Crossing. Centennial girls report much more diversity in their preferences of genres, mentioning all of them except for horror. Contrary to the quantitative results, girls often refer to sports games like FIFA, especially in their initiation. The less experienced girls refer more often to strategy and simulation games, such as Minecraft, but their preference is overall diverse.

Figure 5. Distribution of preferred game genres among participants

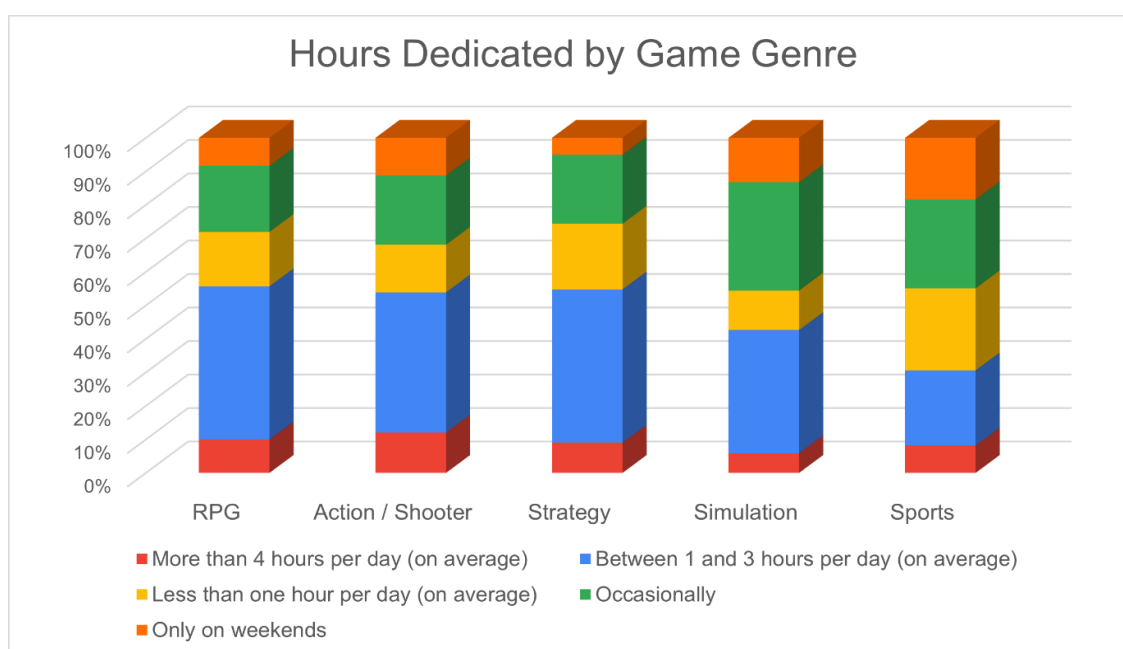


Source: Based on authors' data

The correlation between the data regarding favorite genres (Figure 5) and hours spent (Figure 4) indicates that simulation games and, especially, sports games are played mostly occasionally, despite their commercial success. This contrasts with the more

intensive dedication to action/shooter games (12%) and RPGs (10%); more than half of the players dedicate from 1 to more than 4 hours every day to both genres, being these, along with strategy (55%), the genres to which more time is dedicated on average per day. Obtaining the p-value confirms what can be detected in the graphic distribution: these results are not due to chance, as there is a significant association between the categories and players with a p-value of practically 0 ($2.84 \cdot 10^{-29}$). In addition, the test was performed to see if there are also significant differences between generation ($6.42 \cdot 10^{-95}$) and gender ($3.17 \cdot 10^{-169}$), demonstrating that the results obtained are significant and dependent on the variables, especially more dependent on gender than on generation.

Figure 6. Distribution of hours dedicated by game genre

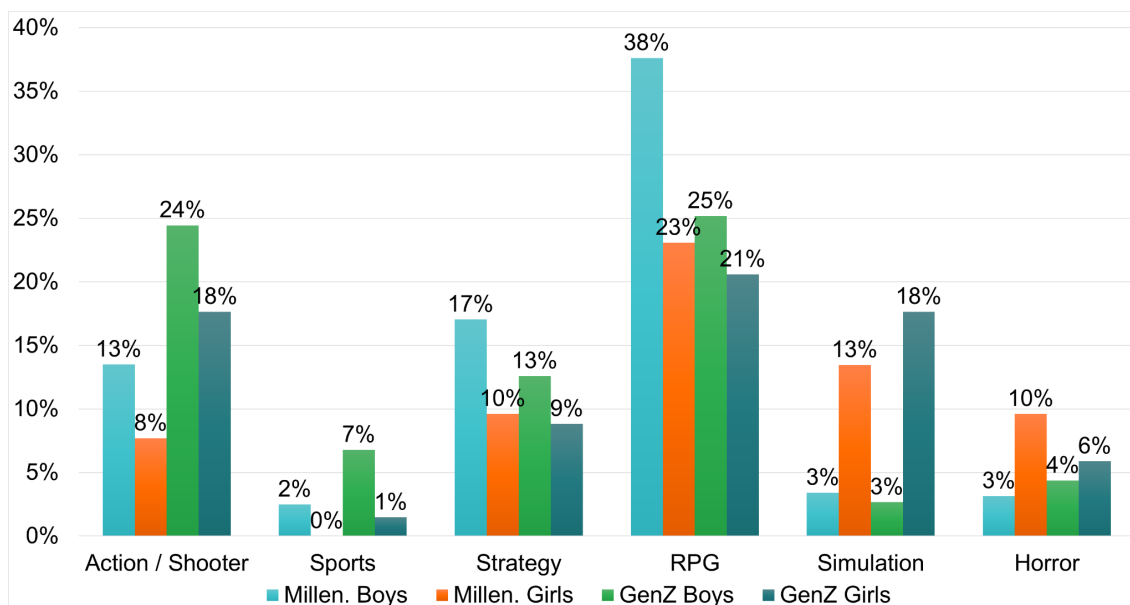


Source: Based on authors' data

Regarding dedication to gaming (Figure 7), the data indicate that more than half of girls and boys of both generations tend to complete games and achieve their objectives, even if this requires the use of some trick or cheat. Significantly, women of both generations report making greater use of tricks than men. Very few of the surveyed subjects, from both generations and genders, claim to get tired of the games they start. Various chi-square and p-value tests performed, with values close to 0, showed that the differences

observed in the data are highly significant and cannot be attributed to chance. Commitment to video games is significantly different between Millennials and Generation Z, as well as between boys and girls.

Figure 7. Dedication and Commitment (Responses to “The Video Games I Play...”)



Source: Based on authors' data

Parallel to their persistence and commitment to the game, most respondents also express a preference for alternating between various video games (between 45% and 61%), which demonstrates the diversity of experiences available and players' ability to adapt.

5. DISCUSSION AND CONCLUSIONS

Video games are not only increasingly popular, they are becoming part of children's lives at earlier ages. In fact, digital natives start playing video games almost before they learn to read, and our comparison between Millennials and Generation Z shows the trend towards earlier initiation. Therefore, the stereotype of adolescence as the starting point for playing video games has become outdated. The leading role of the family in access to gaming is confirmed, especially for Generation Z, indicating a positive generational predisposition towards video games. Our study confirms that negative prejudices about the impact of video games on children seem to be progressively overcome. It can be

concluded that family gaming not only responds to its emotional benefits, the restrictions of the pandemic, and a more positive perception of video games, as pointed out by Pearce et al. (2022) or Pires et al. (2020), but also to cohabitation and domestic leisure.

As indicated by Go et al. (2012), siblings are very important in the initiation into video games, but our study shows that for girl gamers the influence of brothers, boy cousins and fathers is more important than for boys. Despite the importance of family in the initiation, our results also highlight that, for girl video gamers, meeting other fellow girls who play is crucial. Relatives seem to gradually lose importance for Generation Z girl gamers in favour of a community in which they see themselves reflected from the beginning, suggesting that they value their autonomy as gamers and want to develop their own practice. Thus, this study shows a changing trend that is not mentioned in other studies: younger girl gamers seem tired of relying mostly on men to start playing and sharing gaming experiences, and they value other girl gamers more as role models. This trend seems related to the impact of girl and women streamers as role models for Generation Z, as they facilitate access to girl gamers who do not know any other girls who play in their immediate environment. Further research needs to be done to explore the impact of women streamers in the initiation of girls into videogame and to what extent they operate as role models regarding gaming devices and genre for Centennial girls.

Devices endow games with additional meaning, even if their symbolic even does not reflect actual gaming preferences. PlayStation has more status, although it is not the preferred device of any groups. In fact, the preference for PCs exceeds consoles, which are somewhat left behind as the playing devices of childhood. Girls express having grown up with the discourse that these consoles are for boys, but in terms of actual preferences, boys of both generations prefer the PC while it is girl gamers of both groups who prefer the console. This trend illustrates the gender-based digital divide: playing on a PC requires deeper digital literacy and offers better performance, while consoles are readily available to play and are more affordable than computers with high quality graphics.

Likewise, mobile phones are not highly valued, even though their use is very widespread, as all groups seem to give it little seriousness since it is associated with more casual games. While girls admit to this form of play, boys omit it from their discourse, even though they also use mobile phones. It can be deduced that boys give more value to the devices associated with more “serious” and committed games, while girls, who play both, do not associate casual games with something pejorative. Additionally, mobile phone games are more accessible and require less degree of digital literacy, showing again the impact of the gender-based digital divide on gaming devices.

Regarding other gender stereotypes in video games, our data show nuances about the tendency of boys to align with Bartle’s (1990) proposed categories of killer and achiever players, while girls are more aligned with explorer and socializer types, as pointed out by Chicharro Merayo (2014b). Although their own discourse about their gaming habits positions boys as killer or achiever players, they also use less serious and competitive games on mobile devices. The same applies to the PlayStation, which is valued by all but initially perceived by girls as a device for boy gamers. This seems to indicate that the status of serious, complex, and committed gaming is still more discursively associated with boys, even though their actual habits do not match this stereotype. Additionally, while the PC is the preferred device, it is surprising to observe that women of both generations clearly prefer video game consoles compared to men. This contradicts some previous trends, such as those noted in the report by the Asociación Española del Videojuego (2024). However, the preference of Generation Z girls, who are starting to lean more towards the PC, aligns more with these results.

Concerning video game genres, all groups prefer RPGs, which demonstrates a certain level of gaming competence and commitment. Boys tend to prefer action/shooter games more than other types, while girls show a preference for simulation games. Although Millennial girls have not shown as much inclination towards action/shooter games, a changing trend is observed in Generation Z girls, with a growing interest in this genre. Further research is necessary to inquire whether the growing presence of girl streamers that enjoy this genre may be related to this tendency. This trend was confirmed in the discussion group in which more experienced Centennial girls stated that they value and play many action and shooter

games. However, we interpret the disparities between the quantitative results and the discussion groups as part of how Centennials conceptualize genres. Boys report a clear preference for sports, action games and shooters. We can interpret that their discourse responds more to their gendered-based associations with gaming genres than with their actual preferences, as seen in the quantitative results. The disparities between the questionnaire and the discussion groups among Centennial girls can be interpreted to the importance they grant to their initiation into video games, which seems to have had more significance for them than for Centennial boys and which was often linked to sports games like FIFA. Overall, Centennial girls are much more open to different games, showing a tendency that challenges gender stereotypes. Significantly, these preferences also nuance the association between Richard Bartle's categories and gender trends, as girls' preferences are increasingly spread across all genres rather than being linked to types of games previously perceived as more masculine. Ultimately, the data show an evolution towards the diversification of video game genre preferences, aligning with the variety proposed by the Entertainment Software Association and Newzoo for this age group. Notably, Generation Z's preference for action and shooter games surpasses that of Millennials, and girls are playing them more frequently, gradually detaching this type of game from its masculine association. More research needs to be done about the impact of the growing presence of women video game designers in the preferences of younger girls. Girl gamers may feel more welcome due to the fact that the sexist representations of women in video games have slowly decreased, in part thanks to more diversity in the industry.

Importantly, as seen in the discussion groups, boys seem to perform when they discuss their gaming practices in front of other boys. Compared to the results of the questionnaire, they showcase more seriousness and expertise regarding the gaming devices and genres and value having traditionally masculine preferences regarding video game categories. A certain commitment to video games seems to still be valuable to perform masculinity among young boys. Yet, inconsistencies are observed between the gender-based stereotypes and the actual practices of digital natives with respect to playing devices.

The commitment of digital natives to video games is evident in their time usage, types of games, and other practices. It is observed that all groups are willing to invest significant time in games, with considerable percentages averaging between 1 and 3 hours per day. This commitment is directly related to preferred types of games, such as RPGs, action and shooter games, simulation and strategy games, all of which require substantial dedication. A significant majority of players seek to experience all aspects of a title before moving on to another. The only practice that somewhat differentiates girls from the “achievers” player category (Bartle, 1990) is that girls admit to using cheats more frequently than boys, a difference that deserves further investigation.

Chi-square analysis results reveal significant differences in game preferences between Generation Z and Millennials, as well as in their gaming commitment and how they began playing. These findings are statistically significant and underscore the need to consider generational and gender differences, especially regarding gender. However, the main limitation of this study is the absence of discussion groups with Millennials, which would have allowed for a deeper qualitative comparison among the two generations. Ultimately, the differences in preferences and gaming habits between boys and girls are more pronounced among Millennials, while Generation Z shows greater homogenization of tastes and gaming practices across genders.

Overall, some gender stereotypes persist but should be put into context. It is inaccurate to claim that boys enjoy video games more than girls; however, girl gamers do tend to spend less time playing. Women gravitate towards shorter, more spread-out sessions throughout the week, whereas men tend to play for longer periods and more frequently. Nonetheless, a changing trend is detected, as Centennial girls play more frequently than Millennial girls and are starting to become more intensive gamers than their older counterparts. Additionally, data on gaming time usage reflects an evolution towards greater dedication among Generation Z compared to Millennials in both genders. Thus, it can be inferred that the gender gap is gradually narrowing with respect to gaming habits, partly due to greater openness and positive attitudes towards video games among younger generations. Further research needs to be done about the gender gap

in video games with a specific focus on online gaming and communities, as the fear of experiencing harassment may lead girls to avoid certain spaces.

6. FUNDING

This article has not received funding but it is part of the project "La 'manosfera' en Redes Sociales. Prodesage cultural para revertir los estigmas de género y la cultura del odio". Proyecto I+D «Proyectos de Generación de Conocimiento» y a actuaciones para la formación de personal investigador predoctoral asociadas a dichos proyectos, del Programa Estatal para Impulsar la Investigación Científico-Técnica y su Transferencia, en el marco del Plan Estatal de Investigación Científica, Técnica y de Innovación 2021-2023. Ministerio de Ciencia, Innovación y Universidades. Ref. PID2022-141877NB-I00.

7. CONTRIBUTIONS

	Author 1	Author 2	Author 3
Conceptualization	X	X	X
Data curation		X	
Formal analysis	X	X	X
Investigation	X		
Methodology	X	X	X
Supervision			X
Validation			X
Visualization		X	
Writing - Draft	X	X	
Writing – Review & editing	X	X	

8. CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

9. USE OF ARTIFICIAL INTELLIGENCE

The authors declare that no artificial intelligence was used in the preparation of this article.

7. REFERENCES

Asociación Española del Videojuego. (2024). *La industria del videojuego en España. Anuario 2024*. <https://www.aevi.org.es/wp-content/uploads/2025/05/VDIGITAL-ANUARIO2024-comprimido.pdf>

Arias Valencia, M. M. (2000). La triangulación metodológica: sus principios, alcances y limitaciones. *Revista Investigación y Educación en Enfermería*, XVIII(1), 13-16. <https://dialnet.unirioja.es/servlet/articulo?codigo=5331864>

Bartle, R. (1990). Hearts, clubs, diamonds, spades: players who suit MUDs. *Journal of MUD Research*, 1(1), 1-19.

Chess, S., Evans, N. J., & Baines, J. J. (2017). What does a gamer look like? Video games, advertising, and diversity. *Television & New Media*, 18(1), 37-57. <https://doi.org/10.1177/1527476416643765>

Chicharro Merayo, M. (2014a). Jóvenes, ficción televisiva y videojuegos: espectáculo, tensión y entretenimiento. Tendencias generales de consumo. *Revista de estudios de juventud*, 106, 77-97. <https://cutt.ly/Or4NdUar>

Chicharro Merayo, M. (2014b). Estudiando la ficción televisiva y los videojuegos desde una perspectiva de género. *Libro de Actas del II Congreso Internacional de Comunicación y Género* (pp. 304-315). <https://cutt.ly/Jr4NdLXm>

Coyne, S. M., Padilla-Walker, L. M., Stockdale, L., & Day, R. D. (2011). Game on... girls: associations between co-playing video games and adolescent behavioral and family outcomes. *The Journal of adolescent health : official publication of the Society for Adolescent Medicine*, 49(2), 160–165. <https://doi.org/10.1016/j.jadohealth.2010.11.249>

- Engelstätter, B., & Ward, M. R. (2022). Video games become more mainstream. *Entertainment Computing*, 42. <https://doi.org/10.1016/j.entcom.2022.100494>
- Entertainment Software Association (2024). *Essential facts about the computer and video game industry 2024*. <https://cutt.ly/Kr4NfRVG>
- Ertl, B., & Helling, K. (2011). Promoting gender equality in digital literacy. *Journal of Educational Computing Research*, 45(4), 477–503. <https://doi.org/10.2190/EC.45.4.f>
- Eslava, A. (2014). Análisis cualitativo y cuantitativo para los estudios políticos. *Cinta Moebio*, 51, 111-126. www.moebio.uchile.cl/51/eslava.html
- Fundación FAD Juventud (2023). *Videojuegos y jóvenes. Lugares, experiencias y tensiones*. <https://cutt.ly/xr4Nf2wz>
- Gebhardt, E., Thomson, S., Ainley, J., & Hillman, K. (2019). *Gender differences in computer and information literacy. An in-depth analysis of data from ICILS*. Springer Cham. <https://doi.org/10.1007/978-3-030-26203-7>
- Go, J., Ballagas, R., & Spasojevic, M. (2012). Brothers and sisters at play: exploring game play with siblings, *CSCW '12: Proceedings of the ACM 2012 conference on Computer Supported Cooperative Work*, 739–748. <https://doi.org/10.1145/2145204.2145316>
- Gómez-García, S., Planells de la Maza, A. J., & Chicharro-Merayo, M. (2017). ¿Los alumnos quieren aprender con videojuegos? Lo que opinan sus usuarios del potencial educativo de este medio. *Educar*, 53(1), 49-66. <https://raco.cat/index.php/Educar/article/view/317270>
- Guerrero-Pico, M., Masanet, M. J., & Scolari, C. A. (2019). Toward a typology of young producers: Teenagers transmedia skills, media production, and narrative and aesthetic appreciation. *New Media & Society*, 21(2), 336-353. <https://doi.org/10.1177/1461444818796470>

- Helsper, E. J., & Eynon, R. (2010). Digital natives: where is the evidence? *British Educational Research Journal*, 36(3), 503-520.
<https://doi.org/10.1080/01411920902989227>
- Jaramillo, M., & Saldaña, M. (2023). Radiografía de un mito: la representación estereotipada de los videojugadores puesta a prueba en Chile. *Comunicación Y Medios*, 32(47), 38–50. <https://doi.org/10.5354/0719-1529.2023.69107>
- Jenkins, H. (2006). *Convergence Culture: Where Old and New Media Collide*. New York University Press.
- León, G. (2007). El grupo de discusión como artefacto científico para el análisis social. *Razón y Palabra*, 57. <https://www.redalyc.org/pdf/1995/199520710010.pdf>
- Masanet, M. J., Pires, F., & Gómez-Puertas, L. (2021). Riesgos de la brecha digital de género entre los y las adolescentes. *Profesional de la información*, 30(1).
<https://doi.org/10.3145/epi.2021.ene.12>
- Morgenroth, T., Stratemeyer, M., & Paaßen, B. (2020). The gendered nature and malleability of gamer stereotypes. *Cyberpsychology, Behavior, and Social Networking*, 23(8), 557-561. <https://doi.org/10.1089/cyber.2019.0577>
- Newzoo (2021). *Gamer segmentation. An overview of the nine gamer personas*.
https://resources.newzoo.com/hubfs/Newzoo_Gamer_Segmentation.pdf
- Nikken P. & Jansz, J. (2006). Parental mediation of children's videogame playing: a comparison of the reports by parents and children. *Learning, Media and Technology*, 31(2), 181-202. <https://doi.org/10.1080/17439880600756803>
- Olson, C. K. (2010). Children's motivations for video game play in the context of normal development. *Review of General Psychology*, 14(2), 180–187.
<https://doi.org/10.1037/a0018984>
- Pearce, K. E., Yip, J. C., Lee, J. H., Martinez, J. J., Windleharth, T. W., Bhattacharya, A., & Li, Q. (2022). Families playing animal crossing together: coping with video games

during the COVID-19 pandemic. *Games and Culture*, 17(5), 773-794.

<https://doi.org/10.1177/15554120211056125>

Pérez-Escoda, A. & Pedrero-Esteban, L.M. (2021). Retos del periodismo frente a las redes sociales, las fake news y la desconfianza de la generación Z. *Revista Latina de Comunicación Social*, 79, 67-85. <https://www.doi.org/10.4185/RLCS-2021-1519>

Pérez-Escoda, A., Barón-Dulce, G., & Rubio-Romero, J. (2021). Mapeo del consumo de los jóvenes: redes sociales, “fake news” y confianza en tiempos de pandemia. *Index.comunicación. Revista científica en el ámbito de la Comunicación Aplicada*, 11(2), 187-208. <http://hdl.handle.net/10115/17934>

Pires, F., Masanet, M.J., & Scolari, C. (2019). What are teens doing with YouTube? Practices, uses and metaphors of the most popular audio-visual platform. *Information, Communication & Society*, 24(9), 1175-1191. [10.1080/1369118X.2019.1672766](https://doi.org/10.1080/1369118X.2019.1672766)

Pires, F., Vilasís-Pamos, J., Álvarez-Cueva, P., & Anglada-Pujol, O. (2020). Las prácticas de copresencia durante la COVID-19: co-playing en plataformas online. *Hipertext.net*, 21, 57-66. <https://doi.org/10.31009/hipertext.net.2020.i21.05>

Prensky, M. (2001). Digital Natives, Digital Immigrants Part 1. *On the Horizon*, 9(5), 1-6. <https://doi.org/10.1108/10748120110424816>

Punter, R. A., Meelissen, M. R., & Glas, C. A. (2017). Gender differences in computer and information literacy: An exploration of the performances of girls and boys in ICILS 2013. *European Educational Research Journal*, 16(6), 762-780. <https://doi.org/10.1177/1474904116672468>

Spiegel, J. (2021). Prensky revisited: is the term “digital native” still applicable to today’s learner? *English Leadership Quarterly*, 44(2), 12-15. <https://doi.org/10.58680/elq202131529>

Toffler, A. (1980). *The Third Wave*. Morrow.

Tomkinson, S. (2015). The position of women in video game culture: Perez and Day's Twitter incident. *Continuum: Journal of Media & Cultural Studies*, 29(4), 617-634.
<http://dx.doi.org/10.1080/10304312.2015.1025362>

Tyers-Chowdhury, A., & Binder, G. (2021). *What we know about the gender digital divide for girls: A literature review*. UNICEF. <https://cutt.ly/Mr4NjJib>

Vilasís-Pamos, J., & Pires, F. (2022) How do teens define what it means to be a gamer? Mapping teens' video game practices and cultural imaginaries from a gender and sociocultural perspective. *Information, Communication & Society*, 25(12), 1735-1751.
<https://doi.org/10.1080/1369118X.2021.1883705>

Wang, B., Taylor, L., & Sun, Q. (2018). Families that play together stay together: Investigating family bonding through video games. *New Media & Society*, 20(11), 4074–4094. <https://doi.org/10.1177/1461444818767667>