Video Games and New Generations. Analysis of Perceptions, Uses and Consumption Among Children and Young People

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Abstract

This study explores the perceptions, uses, and consumption of video games among children and young people, based on a questionnaire that collected 140 responses. Utilizing a conceptual framework that integrates theories of media learning and the influence of digital media on children's development and learning, the data analysis reveals significant trends in young children's gaming habits, motivations, and opinions. The findings indicate a wide range of behaviours and attitudes, with notable age and gender differences. Specifically, the study demonstrates how video games are used differently across age group and genders, with important implications for young people's cognitive, social, and emotional development. The analyses show that while some children use video games as tools for socialization and learning, others view them primarily as forms of entertainment or escapism. The implications of these findings are discussed in relation to the crucial role that video games can play in the development of children and young people. In this context, foundations are offered for developing educational strategies that utilize video games as effective tools for positive learning and development.

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1. Introduction[1]

Video games represent a pervasive component of contemporary youth culture, no longer limited to mere entertainment but central to the socialization, emotional regulation, and learning experiences of children and adolescents. This evolution has stimulated a robust academic debate on their role in developmental processes, particularly regarding cognitive, emotional, and social dimensions (Gee, 2003; Granic et al., 2014; Rideout, 2017).

While much literature has emphasized the potential risks of excessive or uncritical use − such as aggression (Anderson et al., 2010), addiction (Király et al., 2018), or social withdrawal − recent contributions underline the capacity of games to support learning, digital literacy, and personal growth when integrated into educational and relational contexts (Barab et al., 2005; Shute & Ventura, 2020). Nonetheless, most studies have focused on preselected age groups, often adolescents, or have addressed single variables in isolation (e.g., motivation, aggression, or collaboration).

This study positions itself within this evolving research landscape by adopting a broad age range (8–16 years) and examining the multifaceted experiences of young players through a structured questionnaire. The research aims to investigate children's and adolescents' perceptions, habits, emotional engagement, and learning-related expectations toward video games. By doing so, it contributes to bridging the gap between theoretical reflections and empirical data on media practices in developmental stages. Specifically, we sought to:

- explore gaming habits (frequency, duration, preferred times).
- examine emotional and cognitive reactions associated with gameplay.
- identify perceived benefits and learning potential.
- compare responses by age and gender to detect meaningful differences.

This approach is designed to offer insights useful for educators, parents, and researchers, grounding interventions, and media education strategies in the real experiences of young users.

1 The authors collaborated on the conceptualization and overall structure of the paper. Federica Pelizzari was responsible for drafting all sections, while Michele Marangi conducted a final revision.

2. Games, Development, and Learning

Video games represent one of the most popular forms of entertainment among children and adolescents today. Over the years, the video game industry has become one of the most profitable sectors globally, featuring an increasingly diverse range of genres, game modes, and platforms (Subrahmanyam et al., 2001). This diversification has broadened accessibility and challenged long-standing stereotypes, particularly those associating video games with boys (Jansz & Martis, 2007; Shaw, 2012). The literature also highlights how video games influence the learning process and the development of key skills in both genders (Lucas & Sherry, 2004; Breuer et al., 2020).

Scholars increasingly analyse the video game experience not only as entertainment but as a complex cultural and developmental phenomenon (Granic et al., 2014; Barab et al., 2005; Cole & Griffiths, 2020). Games provide interactive environments in which players explore identities, develop problem-solving skills, and engage in experiential learning (Gee, 2003; Adachi & Willoughby, 2013; Shaffer, 2006; Squire, 2011). These "practice spaces" allow users to experiment with new ways of thinking and acting while reflecting critically on choices and consequences (Hanghøj, 2022).

The relationship between video games and youth development remains a subject of ongoing debate. Some studies have highlighted risks such as addiction, social isolation, and negative academic outcomes (Gentile et al., 2004; Király et al., 2018; Lemmens et al., 2020). Violent content has been discussed in relation to aggression (Johannes et al., 2021). However, recent contributions advocate for a more balanced view, noting that moderate and conscious use may enhance well-being, creativity, and cognitive abilities (Granic et al., 2014; Wang et al., 2021; Przybylski & Weinstein, 2022). The challenge lies in identifying strategies that maximize the benefits of gameplay while mitigating its negative effects (Kardefelt-Winther, 2018). This demands a critical reflection from educators, researchers, and families alike.

The increased participation of girls in video gaming contexts has drawn attention to the need for inclusive frameworks that consider gendered experiences. Research shows that boys and girls engage with games differently – not only in terms of genres but also in relation to motivations and social interactions (Jansz & Martis, 2007; Shaw, 2012; Lucas & Sherry, 2004). These

insights are crucial to interpreting data and designing pedagogical interventions that recognize diverse player identities and preferences.

Video games offer multiple opportunities for educational innovation due to their ability to foster engagement, provide immediate feedback, and promote adaptive learning experiences (Malone & Lepper, 1987; Shute & Ventura, 2020; Kafai & Burke, 2019). Their interactive and goal-oriented nature enables players to experience learning as a process of discovery and action (Gee, 2018; Laine & Lindberg, 2020; Kafai, 2020).

Studies in the field of game-based learning emphasize the importance of designing learning experiences that balance play and pedagogy (Egenfeldt-Nielsen, 2007, 2018; Clark et al., 2016). Teachers and researchers must be aware that not all games are equally suitable for all educational goals (Pelletier, 2008). The development of digital and critical literacy – essential in the 21st century – is one of the key potentials of integrating video games into curricula (Buckingham, 2007; Beavis et al., 2017; Grover & Pea, 2013).

3. Methods and Tools

This research represents the first action of an action-research initiative promoted by several schools in the province of Brescia (Italy), aimed at investigating digital media use and consumption among students. In this initial phase, a quantitative approach was employed to explore the perceptions, habits, and consumption patterns related to video games among children and adolescents. The primary data collection instrument was a structured, closed-ended questionnaire, specifically designed to gather detailed insights into participants' gaming behaviours, preferences, and attitudes. The study involved a sample of 140 respondents, aged between 8 and 16 years, selected through purposive sampling to ensure a diverse and balanced representation in terms of age and gender. The sample included 47.9% male and 52.1% female participants, thereby challenging traditional gender stereotypes around gaming. The largest age group was 12–13 years (28.6%), followed by 8–9 years (25.7%), 10–11 years (18.6%), and 14–15 years (17.1%). The smallest group comprised participants aged 16 or older (2.9%). All respondents were active video gamers.

Researchers designed the questionnaire collaboratively, media educators, and teachers involved in the broader educational project. While it does not replicate any existing validated instrument, the tool draws conceptually from several relevant studies: on gaming frequency and patterns (Przybylski et al., 2010), emotional and cognitive experiences during play (Granic et al., 2014), and the educational potential of digital games (Barab et al., 2005; Breuer et al., 2020). These references informed the selection of thematic dimensions and item formulation, ensuring both relevance and alignment with current research. Each item was written in accessible, age-appropriate language and pre-tested in a pilot phase with 12 students aged 8–14, to verify clarity and comprehension. The original questionnaire was administered in Italian, the native language of all participants. The English version presented in this article was prepared post hoc for publication. Every effort was made to maintain fidelity to the original meaning, though slight variations in semantic nuance are acknowledged as a limitation.

The questionnaire was structured into the following sections:

- Demographic information: Age, gender, and relevant contextual variables.
- Frequency and duration of play: Frequency of gaming sessions, their average duration, and preferred time slots for playing.
- Gaming context: Devices used (e.g., consoles, smartphones, tablets), and whether the participant plays alone or with others.
- Game preferences: Genres and types of games most frequently played (e.g., action-adventure, sports, puzzle, strategy).
- Emotional and behavioural responses: Emotions experienced before, during, and after gaming (e.g., joy, boredom, frustration), and players' self-regulated behaviours (e.g., ability to pause or stop playing).
- Perceived benefits and skills: Participants' opinions on the cognitive and social skills they believe they have developed through gaming (e.g., problem-solving, concentration, collaboration), as well as their views on the educational potential of video games.

The questionnaire included a combination of multiple-choice questions, Likert scales, and ranking items, allowing for structured and diversified data collection. The instrument was administered via an online survey platform,

which facilitated easy and anonymous access. The questionnaire remained open for a two-week period, during which participants could complete it independently. Prior to participation, all respondents were informed of the study's purpose and assured of the confidentiality of their data. Responses were analysed using descriptive statistics (frequencies, percentages) to identify trends and highlight salient patterns. Particular attention was given to disaggregating data by age and gender, in line with the study's objective to examine developmental differences and demographic influences on gaming experiences.

4. Results

More than a third of respondents (35%) play video games daily, indicating that video games are an important part of the daily routine for many young people (Figure 1). Another third plays a few times a week (34.3%), suggesting that for many, video games are a regular activity. The lower percentages of those who play monthly or annually imply that most teens engage with video games relatively frequently, confirming their significance as a recurring form of entertainment.

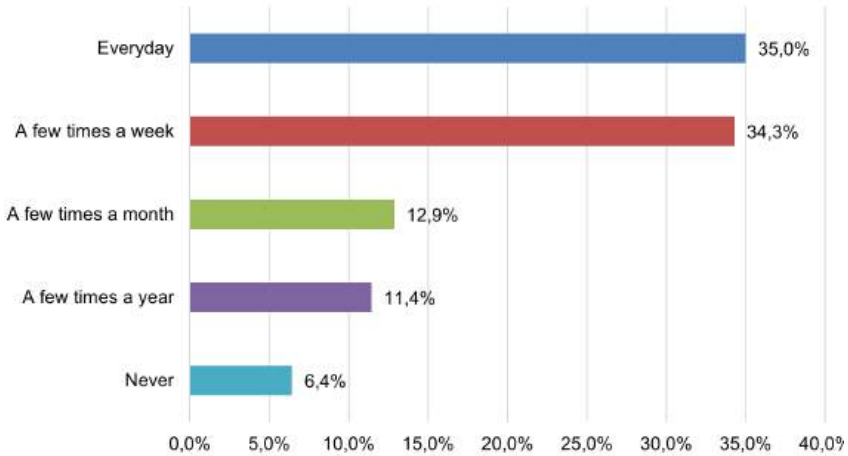

Figure 1 – How often do you play video games?

As shown in Figure 2, almost half of the respondents (48.6%) play once a day, while 35% play twice a day. Only 16.4% play more than three times a day. This data may indicate moderation in use, with most young people appearing to limit the number of daily gaming sessions. However, the presence of 16% who play more frequently could suggest cases of addiction or increased involvement.

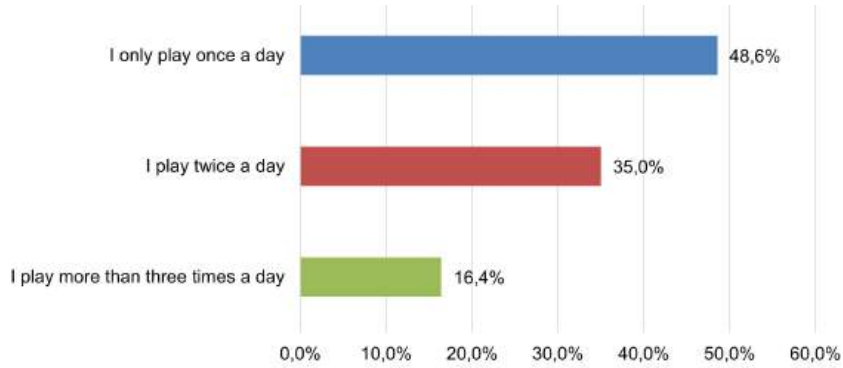

Figure 2 – How many gaming sessions do you have in a day?

The majority (52.9%) play for less than one hour, which may indicate moderate use of time spent playing video games (Figure 3). However, 37.9% of respondents play between one and three hours, while a minority of 9.3% spend more than three hours a day gaming. This finding is important for assessing the impact of time spent on video games in terms of well-being and the balance between play and school activities.

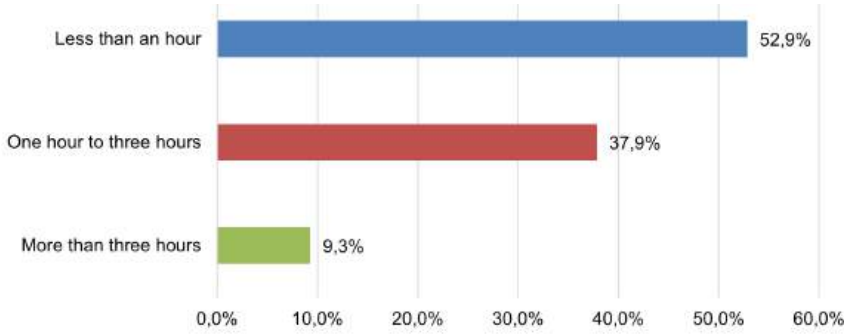

Figure 3 – How much do you play?

Many children play games whenever they get the chance (38.6%), indicating a tendency to take advantage of every free moment for gaming (Figure 4). This suggests that video games are a major recreational activity. About 25.7% play in the afternoon after studying, highlighting an attempt to balance gaming with school commitments. However, a significant percentage (15%) plays in the evening after dinner, while only 5% play in the afternoon instead of studying.

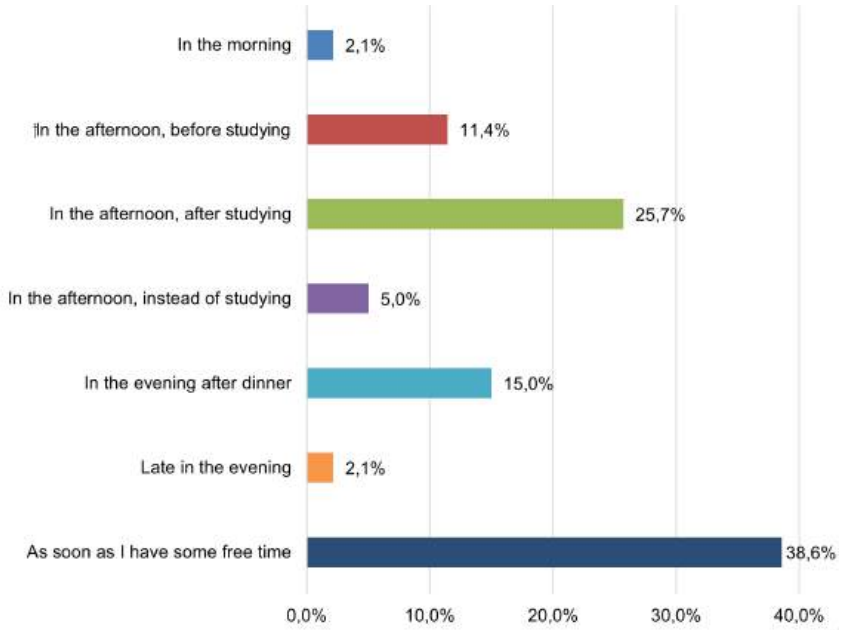

Figure 4 – During which period of the day do you play the most?

More than half of young people (53.6%) play in shared rooms (Figure 5), suggesting that video gaming is often a social activity done in environments where supervision is potentially supervision. The remaining 37.9% play in their own rooms, indicating a trend toward more private spaces as youth grow older or become more passionate about gaming.

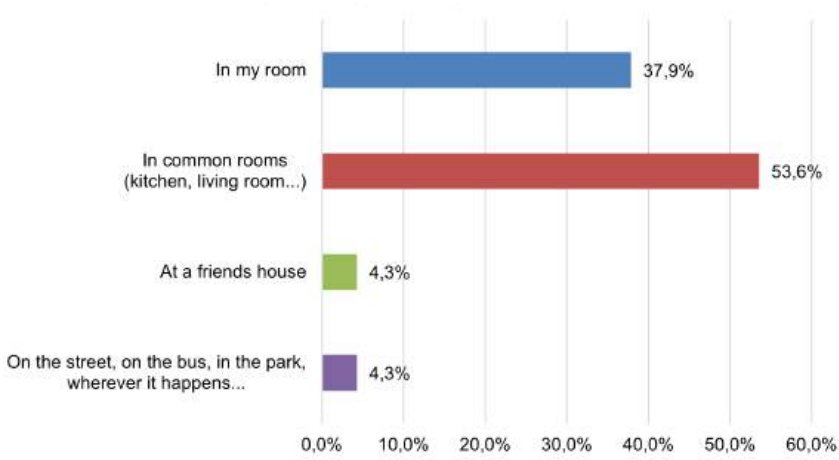

Figure 5 – Where do you play?

Interestingly, 66.4% of players have no problem interrupting their game if requested, while 27.9% do so with annoyance (Figure 6). Only a small portion (5.7%) attempts to postpone the interruption. These data indicate a level of flexibility on the part of young people in balancing time spent on video games with other activities.

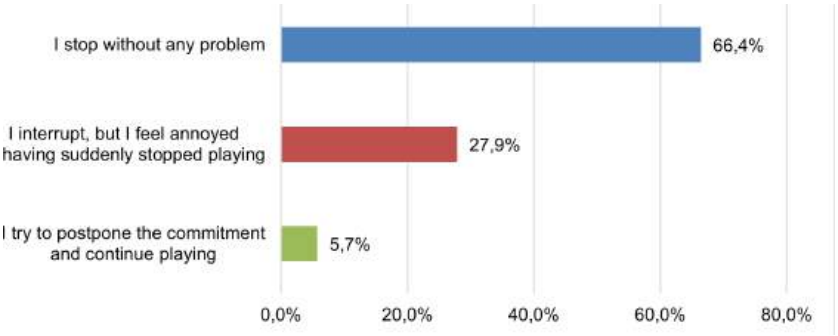

Figure 6 – How do you deal with interruptions during video games?

As shown in Figure 7, consoles such as PlayStation and Xbox are the most widely used devices (29.2%), followed by smartphones (22.3%) and tablets (18.8%). This suggests that while consoles remain dominant, mobile devices are gaining popularity due to their portability and accessibility.

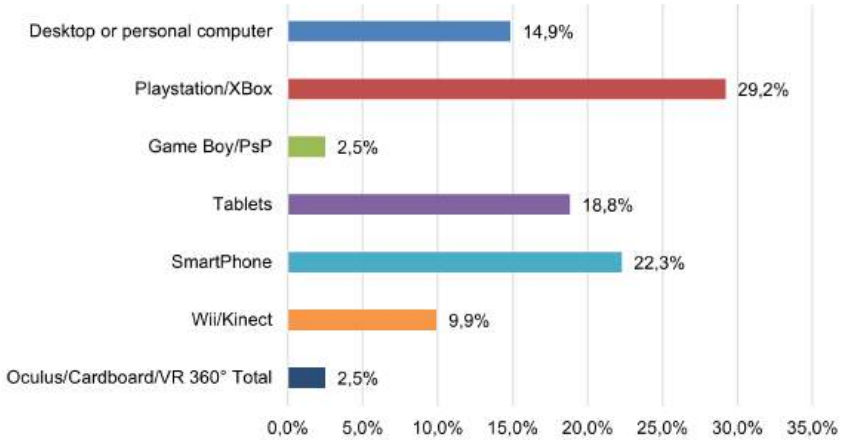

Figure 7 – Which device do you use?

The most popular type of video game is Action-adventure (29.6%), followed by Sports video games (14.8%) (Figure 8). Below 10%, we find other game types: Racing video games (9.7%); MMORPG (9.2%); Strategy (8.7%); Computer Role-Playing Games (6.1%); Shooter/First Person Shooter (5.1%); Education and Simulation (4.1%); Social (3.6%); Arcade and Jump&Run (both at 3.1%); Puzzle games (2.0%); and Management (1%). The lower percentage of participation in Education and Simulation games indicates a lower attractiveness for titles with an explicitly educational purpose.

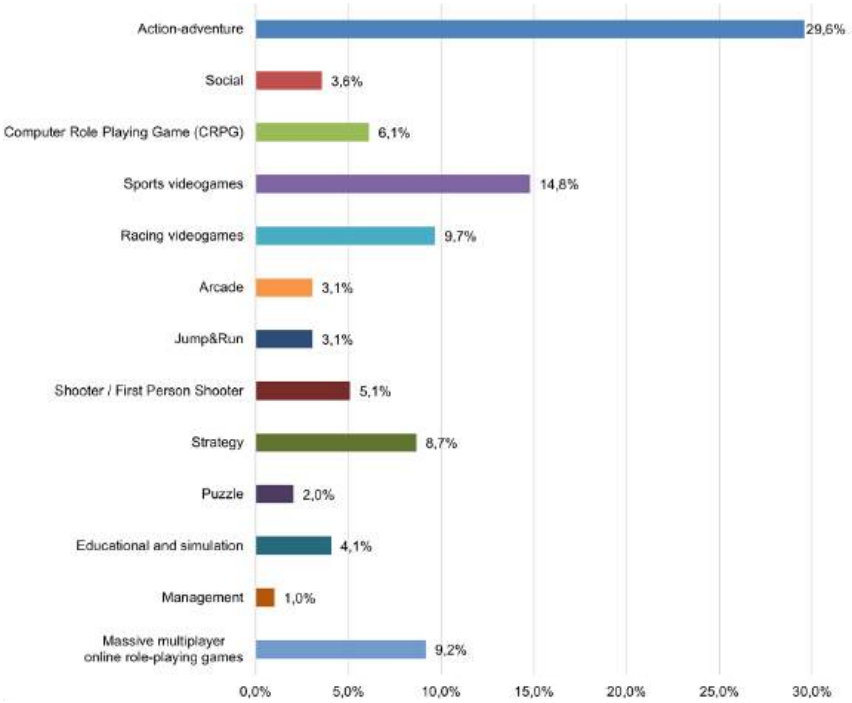

Figure 8 – Which type of video games do you prefer?

To the question regarding whether players developed a winning tactic, the difference between those who found one on their own (42.1%) and those who did not (33.6%) was only 8.5 percentage points (Figure 9). Of the remainder, 18.6% found a winning strategy with friends, and 5.7% watched videos or tutorials.

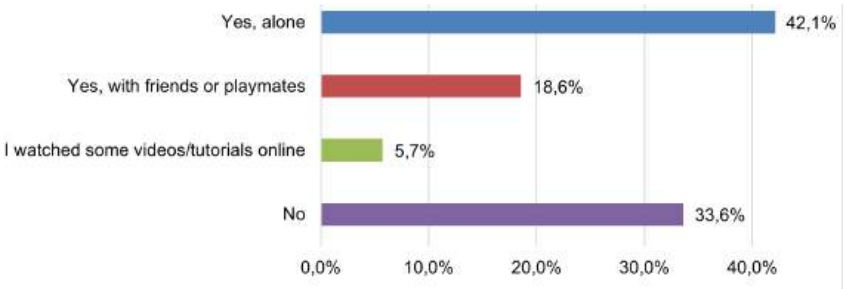

Figure 9 – Have you developed any tactics for winning?

Figure 10 shows the responses to the question of whether players think about stories, characters, or the moves the characters must make during the game. A 1–4 Likert scale was used, and most respondents (31.4%) rated this statement a 2 out of 4. With only a few percentages points difference, the second most common rating was 4 out of 4 (29.3%), followed by 3 (22.1%) and 1 (17.1%).

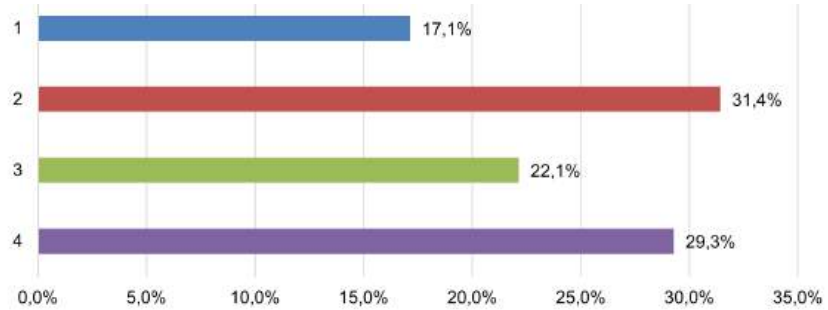

Figure 10 – Do you ever think about video games outside of gaming sessions?

It is interesting to note that the majority, about one-third of respondents (33.3%), play alone (Figure 11). Following closely is those who play "with friends in the same room" (16.4%) and those who "play alone or with others, depending on the situation". The frequency of responses decreases for those who "play with friends online" (12.7%), "with friends in front of the same screen" (9.1%), with anyone online (7.9%), and "with friends on different screens in the same room" (4.2%).

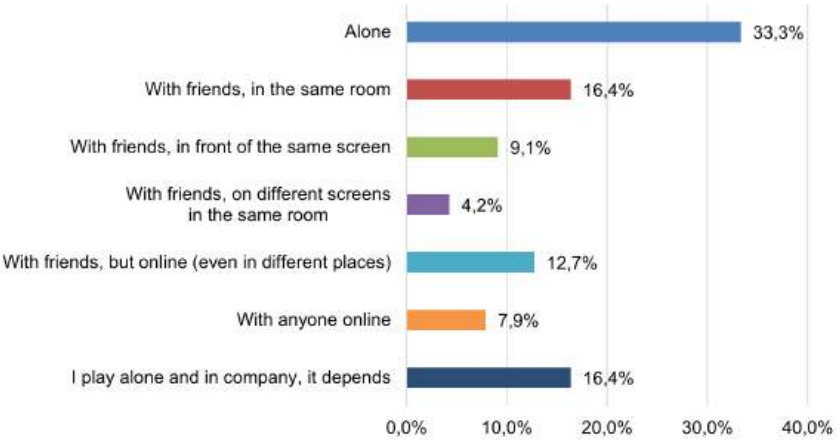

Figure 11 – With whom do you play video games?

To the question of whether adults play video games with boys and girls, the Likert scale value that received more than half of the responses (52.1%) was 4. A clear difference in score follows with option 3 (22.9%), then 1 (13.6%) and 2 (11.4%) (Figure 12). In almost one-third of cases, the adult playing with the video gamer is the father (29.2%) or an older sibling (27.0%). For 17.5% of subjects, the answer is "other relatives", while in 16.8% of cases, it is a younger sibling. Notably, the mother plays video games with boys or girls in only 9.5% of cases.

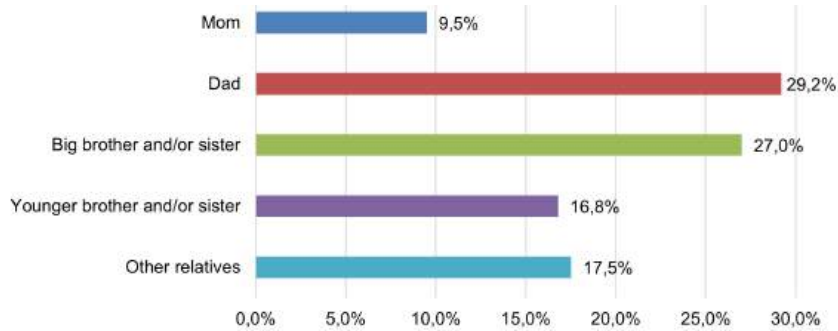

Figure 12 – Which adults play with you?

Contrary to expectations, the most frequent response to the question about playing online was "I have heard about it, but I have never played it" (37.9%) (Figure 13). The answer "Yes, I play it often" received 22.1% of the votes, with only two percentage points less (20.0%) for the other two options. It is evident that almost three in five (55.7%) players prefer not to play online with people they do not know, and one-third (32.1%) play with people online but do not meet them in person. Only 12.1% of players express interest in meeting people they had previously met online.

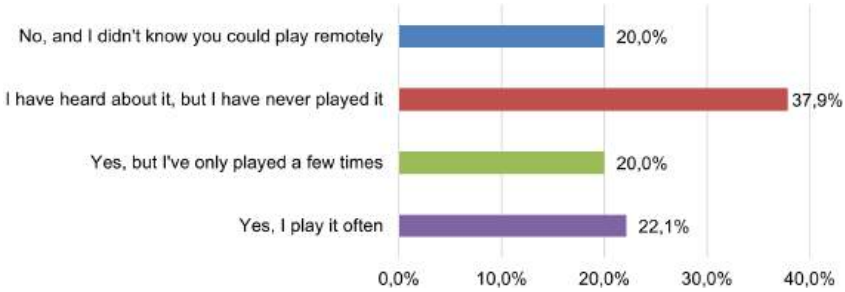

Figure 13 – Do you play online with other people?

An analysis of the collected data shows that emotions associated with video games vary significantly before, during, and after play (Table 1). Before starting to play, the dominant emotions are "Joy" (30.5%) and "Happiness" (26.5%), indicating that the anticipation of playing a video game is often linked to positive feelings and pleasant expectations. However, the emotion of "Boredom", which ranks third with 12.6%, suggests that some individuals may start playing games specifically to counteract a state of boredom. While playing, emotions remain positive, with "Happiness" (29.2%) and "Joy" (22.8%) still at the top spots. This shows how video gaming can be a source of pleasure and enjoyment. However, more complex emotions such as "Anxiety" (8.8%), "Hope" (7.6%), "Anger" (7.0%), and "Surprise" (7.0%) also emerge during gameplay. The presence of "Anxiety" may relate to challenging or competitive situations, while "Anger" could reflect frustration in response to difficulties or obstacles within the game. The emergence of "Hope" and "Surprise" indicates that players are emotionally engaged, hoping for a positive outcome or being taken aback by unexpected events that the game may present. After playing, "Happiness" (23.9%) and "Joy" (24.5%) remain the prevailing emotions, suggesting that the gaming experience leaves players feeling satisfied. However, it is interesting, however, to note that after the activity concludes, some negative emotions tend to surface. "Boredom" (10.7 %) makes its appearance again, indicating that the game serves as a temporary escape from boredom. Additionally, emotions such as "Sadness" (6.3%) and "Disappointment" (5.7%) become more prominent, suggesting that the end of the video game experience may leave a sense of emptiness or dissatisfaction. These latter emotions could be related to factors such as failure to achieve set goals or nostalgia for the time spent in gaming.

Table 1 – What emotions do you feel before/during/after...

	What emotions do you feel..		
	...before playing video games?	...while playing video games?	...after playing a video game?
Happiness	26,5%	29,2%	23,9%
Anxiety	4,6%	8,8%	2,5%
Disappointment	1,3%	3,5%	5,7%
Disgust	0,0%	0,0%	0,0%
Contempt	0,0%	2,3%	1,9%
Jealousy	0,0%	1,2%	0,0%
Joy	30,5%	22,8%	24,5%
Envy	0,0%	1,8%	0,0%
Boredom	12,6%	0,0%	10,7%
Nostalgia	2,0%	0,0%	4,4%
Offense	1,3%	1,2%	0,0%
Fear	1,3%	4,1%	1,9%
Forgiveness	1,3%	1,2%	0,0%
Anger	3,3%	7,0%	5,0%
Resignation	0,0%	0,0%	4,4%
Remorse	1,3%	0,0%	1,3%
Surprise	7,3%	7,0%	4,4%
Hope	5,3%	7,6%	1,9%
Sadness	0,0%	0,6%	6,3%
Shame	1,3%	1,8%	1,3%

The skills that participants believe are most developed through video games (Figure 14) include “Teamwork” in 19.4% of cases followed closely by “Fast reaction time” (18.8%). Not far behind are “Creativity” (14.7%) and Experimenting with Strategies (9.4%). “Reflection and concentration” (8.4%), “Problem solving” (7.9%), “Accurate planning “(6.8%), and “Mastering stress” (5.2%) also rank among the skills developed. The remaining skills, such as “Discipline and resistance”, “Well-Thought-Out Time Management”, and “Sense of orientation in physical spaces”, have an importance of 3.1%.

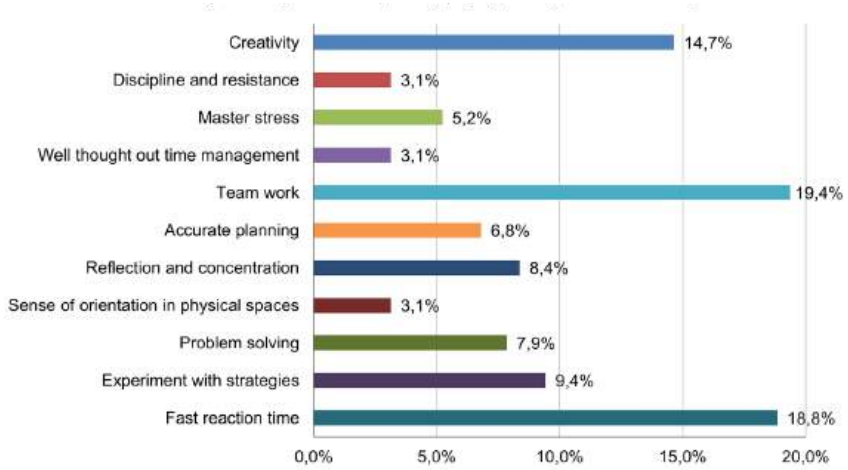

Figure 14 – What skills have you developed by playing video games?

According to users, the features of video games that could enhance learning in school subjects (Figure 15) include "Fun" (17.5%), "Collaboration with others" (14.2%), "Skill levels and competencies" (13.1%), "Specific challenges" (10.9%), and "Achievable and challenging goals" (10.4%). Two tied characteristics, "Clear rules" and "Visibility of progress", were chosen by 7.7% of subjects. Below 6%, other characteristics of the video game world include "Ranking" (5.5%), "Points and awards" (4.4%), "Compelling narrative" (3.8%), "Instant feedback" (3.3%), and "Community appreciation" (1.6%).

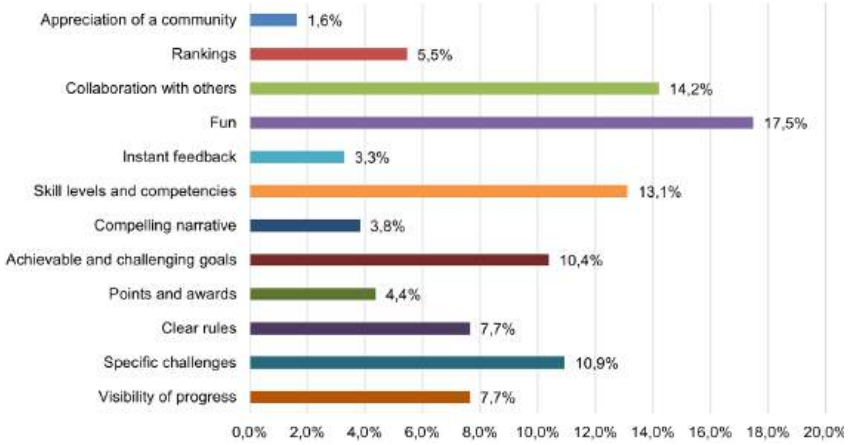

Figure 15 – Which features of video games can improve your learning experience in school?

In addition to overall trends, the data were analysed by age and gender to uncover potential differences in gaming practices, preferences, and emotional responses. Disaggregating the data by age and gender revealed several meaningful patterns in how children and adolescents experience video games. While the gender balance and age distribution were established through purposive sampling, some internal differences emerged in the responses. Game preferences varied by gender: action-adventure and sports games were more frequently chosen by boys, especially in the 12–13 age group, while girls – particularly those aged 10–11 – reported a higher interest in simulation and puzzle games. Boys reported playing more frequently and for longer periods, while girls were more likely to associate gaming with creativity and emotional expression. When analysing emotional responses, younger participants (ages 8–9) reported higher levels of joy and surprise, while older adolescents (14–15) mentioned feelings of boredom and frustration more frequently. Boys were more likely to report competitive excitement and challenge-related emotions, whereas girls described feelings of calm, reflection, and narrative immersion.

Regarding self-regulation, a larger proportion of younger children claimed to stop playing when asked by an adult, while older respondents showed more autonomy in managing their playtime – though with greater difficulty in interrupting longer sessions. These findings suggest that gender and age are crucial factors that shape the subjective experience of gaming, not only in terms of preferred genres or frequency of play but also in emotional engagement and perceived benefits. Tailoring educational interventions to these differences may help foster more inclusive and developmentally appropriate uses of video games.

5. Discussion

The findings of this study provide valuable insights into how children and adolescents interact with video games, revealing distinct patterns based on age, gender, and individual perceptions. Rather than reinforcing stereotypical views, the data highlight the diversity of experiences and meanings that young players attribute to gaming.

The frequency and duration of play varied widely across participants, with boys tending to engage in longer and more frequent sessions than girls. However, these differences should not be interpreted as indicators of excessive use, as the questionnaire did not collect precise data on session duration or contextual factors. Future studies may benefit from integrating more granular time-tracking tools to evaluate actual exposure and its implications (Gentile et al., 2004; Radesky et al., 2016).

Participants across all age groups identified multiple benefits associated with gameplay. Younger children reported elevated levels of joy and curiosity, while older adolescents expressed more ambivalent emotional responses, including frustration and boredom. These findings align with previous studies suggesting that emotional experiences linked to gaming evolve with age and cognitive development (Granic et al., 2014; Ryan et al., 2006; Ferguson, 2011).

Perceived skill development – particularly in areas such as problem-solving, concentration, and strategic thinking – was reported by a substantial portion of the sample, especially among frequent players (Boot et al., 2018). Girls more often linked gameplay to creative thinking and emotional reflection, reinforcing the idea that different forms of engagement may foster diverse types of learning (Barab et al., 2005; Breuer et al., 2020; Adachi & Willoughby, 2013).

The belief that video games can serve educational purposes was shared across age groups. While it may seem intuitive that "fun" supports learning, the responses suggest a deeper awareness among students of how interactivity, challenge, and feedback contribute to their understanding and retention of content. This perspective is consistent with recent research in game-based learning and digital literacy (Gee, 2018; Shute & Ventura, 2020; Malone & Lepper, 1987; Kafai, 2006).

Importantly, the analysis of age- and gender-based differences revealed how socio-demographic variables influence gaming preferences, emotional engagement, and perceived benefits. While the near-equal participation rates of boys and girls were the result of purposive sampling, the internal variation in their responses offers meaningful insights into gendered experiences. Boys and girls differ not only in game preferences but also in how they describe emotional engagement and the perceived educational value of gam-

ing. These distinctions reinforce the idea that gender plays a significant role in shaping how young people interpret and benefit from gameplay (Pelletier, 2008; Cheng et al., 2021).

Similarly, the concentration of responses from 12–13-year-olds – also attributable to the sampling strategy – coincides with a critical developmental phase characterized by identity formation and peer comparison. Within this group, gaming is closely tied to social bonding and strategic exploration. In contrast, younger children (8–9) relate more to gaming as a space of imaginative and affective engagement (Shaffer, 2006; Squire, 2011).

These interpretations are not intended to be generalized, but rather to illustrate how a nuanced reading of age- and gender-based differences can support the development of inclusive, developmentally informed educational interventions.

Overall, this exploratory study provides a foundation for more detailed investigations into how young people perceive, use, and learn from video games. Future research should aim to refine measurement instruments, include qualitative components, and examine contextual mediators such as family norms, school environments, and peer influence (Przybylski et al., 2010; Vorderer et al., 2003; Griffiths et al., 2014).

6. Conclusions

This study explored how children and adolescents perceive and experience video games, offering insights into the diversity of gaming practices, emotional responses, and perceived benefits across age and gender groups. The results underscore the complex and multifaceted role that video games play in the lives of young people – serving not only as entertainment but also as environments for emotional expression, skill development, and potential learning.

The diversity in responses highlights the importance of avoiding generalizations when analysing youth gaming behaviours. Age and gender influence not only game preferences but also the emotions linked to gameplay and the educational value attributed to gaming. These findings support the need for

pedagogical approaches that consider learners' individual experiences, interests, and developmental stages.

Although this was an exploratory study, it lays the groundwork for future research. The development of more robust tools – including validated questionnaires and mixed-method designs – would allow for a deeper understanding of how young people engage with video games. Additionally, future research should aim to further disaggregate findings by gender and age group, exploring the interplay between demographic variables and gaming outcomes. Developing validated instruments that account for both behavioural data and subjective experiences could enhance the accuracy of such studies.

In educational contexts, the findings encourage a differentiated use of video games, tailoring strategies to learners' profiles and game preferences. A critical and reflective integration of video games into pedagogical practices holds promise for promoting motivation, creativity, and collaborative skills.

By grounding media education in empirical evidence and real-life practices, we move closer to realizing the potential of digital games as allies in learning and development.

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