



Boston Children's
Digital Wellness Lab

Connected Play: Adolescent Gaming and Perceived Loneliness

Date of Release: September 2024



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Executive Summary



During adolescence, young people undergo dramatic social development that leads to changes in their relationships with their families and friends. During this turbulent time, adolescents are especially sensitive to social exclusion, likely contributing to the high levels of loneliness currently reported by teenagers (Santini et al., 2021; Twenge et al., 2021). Adolescents are also currently turning to online gaming in large numbers as a space for forming and maintaining social connections (Albarello et al., 2021; Carter et al., 2020; Olson, 2010; Waechter & Meschik, 2023), potentially as a way to mitigate unmet social needs (Kowert et al., 2014). The potential impact of this type of gameplay, however, is not entirely clear and likely depends on both gameplay and player characteristics, including the type and quality of in-game interactions (Emmerich & Masuch, 2017), as well as the player's gender and age (e.g., Brooks et al., 2016; Coyne et al., 2011; Dezuanni et al., 2015; Ferguson et al., 2016).

The present study analyzes survey responses from a diverse group of approximately 1,500 teenagers nationwide to explore the social dynamics of online gaming (e.g., types of play, gaming companions, modes of communication) and their associations with perceived loneliness among adolescent boys and girls. These data begin to reveal a picture of how individual characteristics, particularly gender, relate to gaming behaviors and social dynamics. The results serve as a foundation for recommendations to young people, parents, and game designers who wish to maximize the benefits of video game play on social wellbeing and adolescent development. For example, gameplay and in-game social interactions were associated with increased levels of loneliness, especially for boys. **While lonely adolescents may turn to gaming for social connections, they are more likely to report negative experiences, suggesting that these virtual environments are not providing the supportive and fulfilling interactions they need. However, game designers, parents, and young people can work together to maximize the benefits of video game play on social wellbeing and adolescent development.**

Key Findings

Adolescents' Social Gaming

Widespread Game Play

93% of adolescents played digital video games in the past month, with 79% starting before age 10, underscoring the deep-rooted popularity of gaming among youth.

Various Gaming Partners

Teens reported playing with a wide range of gaming partners, including their existing networks (e.g., friends and family) and extending to those outside their immediate circle, like strangers. Nearly 70% of teens engage in online gaming with strangers weekly, reflecting the extensive global nature of modern gaming.

Real-Time Communication

Over 50% of the teenagers report frequently engaging in real-time communication with friends and family, while about one-third actively engage with strangers. Because real-time communication is often integral to online gaming, helping to facilitate tactical discussion and enhancing the overall experience, many online multiplayer games seem to encourage real-time interaction, even among players who do not know each other.

Cross-Platform Communication

While 62% of adolescents report using in-game chat, nearly half also use other platforms to continue conversations. Since many teens engage across multiple platforms, this trend underscores the need for cross-platform safety measures to protect young gamers.

Positive and Negative Experiences

While most teens report positive (e.g. civil, safe) gaming interactions, approximately 20% reported encountering toxicity and safety issues when interacting with strangers. Gaming environments, it seems, are spaces of both positive engagement and potential risk.

93%

of adolescents play digital video games

56%

frequently engage in real-time communication while gaming with friends/family

33%

actively communicate with strangers

Key Findings

Social Gaming & Loneliness

Lonelier Adolescents Game More

Adolescents who report higher levels of loneliness tend to game more and communicate more with gaming partners, especially with strangers. These young people may be seeking more opportunities to connect given their feelings of isolation, but such behavior may also increase their vulnerability to various forms of online exploitation that prey on this eagerness.

Loneliness and Negative Perceptions of Gaming Environments

Lonelier teens are more likely to perceive their gaming environments as negative, toxic, and unsafe compared to their less lonely peers. Given their desire to connect in online spaces, they may be more vulnerable to exposure to negative social environments.



Adolescents who report higher levels of loneliness tend to game more and communicate more with gaming partners, especially strangers.

Lonelier teens are also more likely to perceive their gaming environments as negative, toxic, and unsafe.

Key Findings

Individual Differences

Gender Differences

Boys and girls differ significantly in how they engage with gaming and potentially use it as a coping mechanism for loneliness.

- **Social Interaction:** Boys engage more frequently in social gaming with a diverse array of partners and are more active communicators, particularly with strangers. Girls, on the other hand, tend to game more with known contacts, such as family members. These patterns may expose boys to higher levels of risk from interacting with strangers online, while potentially offering girls stronger connections to family and friends.
- **Perceptions and Experiences:** Boys view gaming interactions as more competitive, while girls see them as more collaborative.
- **Loneliness and Gaming:** The link between loneliness and increased gaming activity is stronger in boys. These boys who report higher levels of loneliness are also more likely to engage in extended communication with strangers, possibly in an effort to seek out new social connections through gaming. In contrast, girls experiencing higher levels of loneliness do not seem to turn to gaming in the same way as boys.

Age Differences

Younger (13-14 years old) and older (15-17 years old) adolescents did not differ in terms of overall gaming time, choice of gaming partners, or in-game communication habits. Given that most teenagers in our sample started gaming before 10, this suggests that gaming behaviors remain relatively consistent as adolescents grow older. However, there are notable distinctions in their gaming experiences and emotional responses:

- **Gaming Experience:** Younger adolescents reported more positive experiences in their gaming interactions compared to their older peers.
- **Loneliness and Gaming Habits:** Older adolescents reported significantly higher levels of loneliness. This increase in loneliness might influence their gaming habits and their well-being outcomes.

Boys and girls use video games differently when they are lonely.

Boys are more likely to experience games as competitive, playing more often and reporting negative social experiences when feeling lonely.

Girls typically see games as collaborative events with friends/family, and are less likely to increase their gaming when feeling lonely.



Problem Statement

Adolescence is a critical period for social development and dynamic peer relationships. Many adolescents experience loneliness — a state of perceived social isolation that is significantly correlated with anxiety, depression, stress, suicidal ideation, and other mental health challenges (Santini et al., 2021; Twenge et al., 2021). A meta-analysis of pre-pandemic studies across 76 countries reported loneliness prevalence rates among adolescents aged 12 to 17 ranging from 9.2% to 14.4%, varying by geographic region (Surkalim et al., 2022). **Effective social connections during this phase are essential, as they can mitigate feelings of isolation and support healthy psychological development (e.g. Jose et al., 2012).**

Social Gaming: A Third Place

In this digital age, adolescents' social lives exist both online and offline. **While social media sites are often discussed as prominent internet-based social spaces, online gaming has emerged as a key environment for adolescent socialization, providing an attractive, accessible environment for forming and maintaining social connections** (Albarello et al., 2021; Carter et al., 2020; Olson, 2010; Waechter & Meschik, 2023).

Video games have increasingly become a significant part of daily teen life, reflecting broader trends in how adolescents engage with technology and each other. Research from the Pew Research Center shows that a striking 85% of U.S. teens report playing video games, with 41% playing daily. More tellingly, 72% of teens who play video games cite spending time with others as a key reason for their engagement (Gottfried & Sidoti, 2024). These games provide not only an opportunity for entertainment and enjoyment for young people, but also a chance to connect with friends they have already made and potentially even meet new ones (UNICEF, 2024).

Video gaming, therefore, is often referred to as the “third place”, an informal, enjoyable gathering space separate from home or school, where interactions are centered on shared interests (Ducheneaut, Moore, & Nickell, 2007). These environments offer valuable interaction opportunities and can satisfy immediate psychological needs (Goncalves et al., 2023), appealing particularly to lonelier adolescents seeking social connections. Research indicates that individuals with smaller, lower-quality offline social circles are more inclined to engage in online social play, possibly in an attempt to fulfill unmet social needs (Kowert et al., 2014). While these youths may sometimes benefit socially from their online gaming, the benefits are not consistent for all players (Egami et al., 2024). **For some teens, video games may not effectively foster new, stronger social bonds that are crucial for developing a sense of belonging and mitigating negative psychological outcomes, underscoring the complex nature of gaming as a tool for social interaction.** (Kim et al., 2022; Kowert et al., 2014).

The Relationship Between Connected Gaming and Adolescent Loneliness

Apart from the quality of their existing social connections, other individual factors may alter how young people experience social gaming. The genders seem to differ in gaming preference, duration, and motivations, as well as effects of variables such as game genre (e.g., Brooks et al., 2016; Coyne et al., 2011; Dezuanni et al., 2015; Ferguson et al., 2016). For boys, competitive games such as shooters and strategy games can serve as arenas for asserting dominance in a social context. Boys engage in in-game or cross-platform interactions centered on shared challenges and victories, allowing them to experience a sense of achievement and solidarity. This combination of competition and teamwork might satisfy their need for social connection through mastery and control, particularly appealing to lonely boys seeking validation and compensating for social difficulties outside of gaming spaces (Kowert et al., 2015). In contrast, lonely girls may seek more direct interactions for support, often through social media and texting (Yau et al., 2021). Their gaming may emphasize collaborative elements, focusing on games that promote shared narratives and collective goals, which meet their social needs through direct emotional support and community building (e.g. Dezuanni et al., 2015). **Considering these differences between genders in their motivations and uses of video games, boys and girls are likely to experience different social consequences of their play.**

The striking social development that occurs during the teenage years points to likely differences in how young people experience online social gaming as they progress through adolescents. Research suggests that social support systems and interaction preferences evolve as adolescents age, which could influence how they engage in, benefit from, and/or are impacted by video gaming environments (e.g. Davis, 2012). Specifically, as adolescents progress through key developmental stages, connecting with peers becomes increasingly vital (Freeman & Brown, 2001). **Exploring how these connections manifest in online gaming environments provides insights into the potential risks and opportunities of this immensely popular social setting during different stages of adolescent development.**

The relationship between adolescents' perceived loneliness and their gaming behaviors is complex, as demonstrated by mixed findings in the existing literature; while some studies link gaming to increased loneliness, others report no such connection or even suggest potential benefits for certain groups (Carter et al., 2020; Goncalves et al., 2023; Shoshani & Krauskopf, 2021). This study delves into how adolescents engage with different types of games, the various methods and platforms they use to connect with others, and the nature of their gaming sessions. It scrutinizes how these factors interrelate with adolescents' levels of loneliness and examines if these dynamics are different by gender and age. Our aim is to unravel the complex ways in which lonelier kids play games and interact with other players in this space, providing nuanced insights into the social dynamics of adolescent gaming.



Research Questions

This study explores the social dynamics of adolescent online video game play, with a particular focus on how perceived loneliness may motivate boys and girls to engage in specific types of gaming and related interactions. Specific research questions are formulated as follows:

What are the **patterns and contexts** of video game play among teenagers?

- How frequently do teenagers engage in different types of video game play, such as solo versus social play, and two-player versus multiplayer gaming?
- Who do they typically play with: family, friends or strangers?

How do teenagers **communicate** during different gaming contexts?

- Is there a preference for real-time versus brief communications during gameplay?
- What platforms are predominantly used for communication while gaming, such as in-game chat or other digital communication tools?

How do teenagers generally **experience different types of video game play** (e.g., competitive vs. collaborative, safe vs. non-safe, civil vs. toxic)?

How do patterns of gaming, gaming-related social interactions and their associations with **perceived loneliness differ between boys and girls?**

How is **perceived loneliness** associated with gaming type, communications type, and general gaming experiences among adolescents?

How do patterns of gaming, gaming-related social interactions, and their associations with **perceived loneliness differ between younger (13-14) and older (15-17) teens?**



Methodology

We addressed our research questions by conducting an online survey of 1,468 adolescents aged 13-17 across the United States. The survey was administered from November 3 to 10, 2023. We utilized Alchemer, an online research platform, to recruit participants. Alchemer connects with over 350 survey panels, encompassing a global network of over 437 million users. For our study, American adolescents who were pre-registered with these panels were invited to participate. To ensure a representative and diverse sample, we established quotas based on age, gender identity, race/ethnicity, and type of school, with participation from each of the 50 states.

The breakdown was as follows:

- **Age:** 20.4% 13-years-olds (N = 300); 20.2% 14-years-olds (N = 297); 19.9% 15-years-olds (N = 292); 19.2% 16-years-olds (N = 282); and 20.2% 17-years-olds (N = 297).
- **Gender Identity:** 47.3% girl/woman (N = 695), 46.7% boy/man (N = 685), 3% non-binary (N = 44).

Note on Gender Differences: In this study, we focused on comparing boys and girls in our analyses of gender differences. The number of non-binary participants was not sufficient to generate the statistical power necessary for meaningful comparison. We acknowledge the importance of considering gender beyond the binary framework and recommend future research with larger sample sizes to explore these experiences more comprehensively.

- **Race/Ethnicity:** 41.3% white/non-Hispanic; 25.6% Hispanic; 13.7% black/non-Hispanic; 6.9% multi-racial; 4.9% Asian; 2.1% American Indian; 0.5% Middle Eastern; 0.7% Hawaiian; 1.1% other and 3.2% prefer not to answer.
- **Grade:** 26.4% in middle school (5-8, N = 375), 71.9% in high school (9-12, N = 1020), and 1.7% not in school (N = 24).
- **Type of School:** 75.5% in public school (including charter schools, N = 1053), 14.5% in private schools (including religious or secular schools, N = 202), and 6.6% in homeschool (N = 92).

The survey explored various aspects of the participants' gaming attitudes and behaviors (during a "typical week"), including their interactions with others within gaming environments, perceptions of these environments, and perceived loneliness (within the past month). Prior to the main data collection phase, a preliminary soft launch of the survey was conducted to assess completion rates and response patterns. This pilot test involved 58 respondents, whose data were subsequently excluded from the final analysis to reflect adjustments made after the soft launch.

The Boston Children’s Hospital IRB reviewed and approved this study and waived the need for parental consent. All participants were part of Alchemer’s survey network and had previously agreed to be contacted for survey opportunities, providing an initial layer of consent. At the beginning of our survey, participants were presented with detailed information about the study, including its purpose, potential risks, compensation details, contact information for the research team, and other pertinent details. By proceeding with the survey (clicking the “next” button), participants acknowledged their understanding of this information and consented to participate, with the option to withdraw at any time.

Participants received compensation from their respective survey companies in the form of points, proportional to the survey’s length. These points could be redeemed for various rewards such as Amazon gift cards, PayPal deposits, or upgrades to certain services, in accordance with each company’s specific agreement. Compensation structures varied slightly between companies.

To ensure participant engagement and attention, we incorporated an “attention-check” question towards the end of the survey. Participants who failed to answer this question correctly (N = 200) were disqualified and redirected to an external webpage. We rigorously reviewed and cleaned the final data set to exclude incomplete or low-quality responses.

Data Analysis

Our analysis was structured to dissect various aspects of gaming behaviors among adolescents, examine demographic differences, and then explore the specific associations between loneliness and gaming behaviors.

General Gaming Behaviors

We calculated descriptive statistics to summarize these behaviors, providing a baseline understanding of gaming behaviors among adolescents.

Analyzing Demographic Differences

We conducted Analysis of Variance (ANOVA) and chi-square tests to determine if gaming behaviors vary by gender and age groups (13-14 vs. 15-17), helping to identify any statistically significant differences between boys and girls, younger and older adolescents.

Correlation of Loneliness with Gaming Behaviors

Multiple Regression Analysis: We utilized multiple regression analysis to explore how loneliness, age, and gender are associated with gaming behaviors. This method allowed us to control for demographic variables while assessing the relationship with loneliness.

Subgroup Analysis: Subgroup analyses were conducted to determine how gender and age moderate the relationship between loneliness and gaming behaviors. These analyses helped identify whether the strength of these associations varies significantly between different genders and age groups.

Note on Statistical Significance and Beta Coefficients

- Throughout the report, the symbols “*”, “**” and “***” denote different levels of statistical significance, which reflect the probability that the observed differences or associations are not due to random chance. “*” indicates $p < .05$ (95% confidence the result is not due to chance), “**” indicates $p < .01$ (99% confidence), and “***” indicates $p < .001$ (99.9% confidence). It should be noted that all results reported in the main text were statistically significant, even if they are not marked with an asterisk.
- The beta (β) values reported in the multiple regression analyses quantify the individual contribution of each predictor (such as loneliness, age, and gender) to the model, controlling for other variables. A beta coefficient provides direction and magnitude:

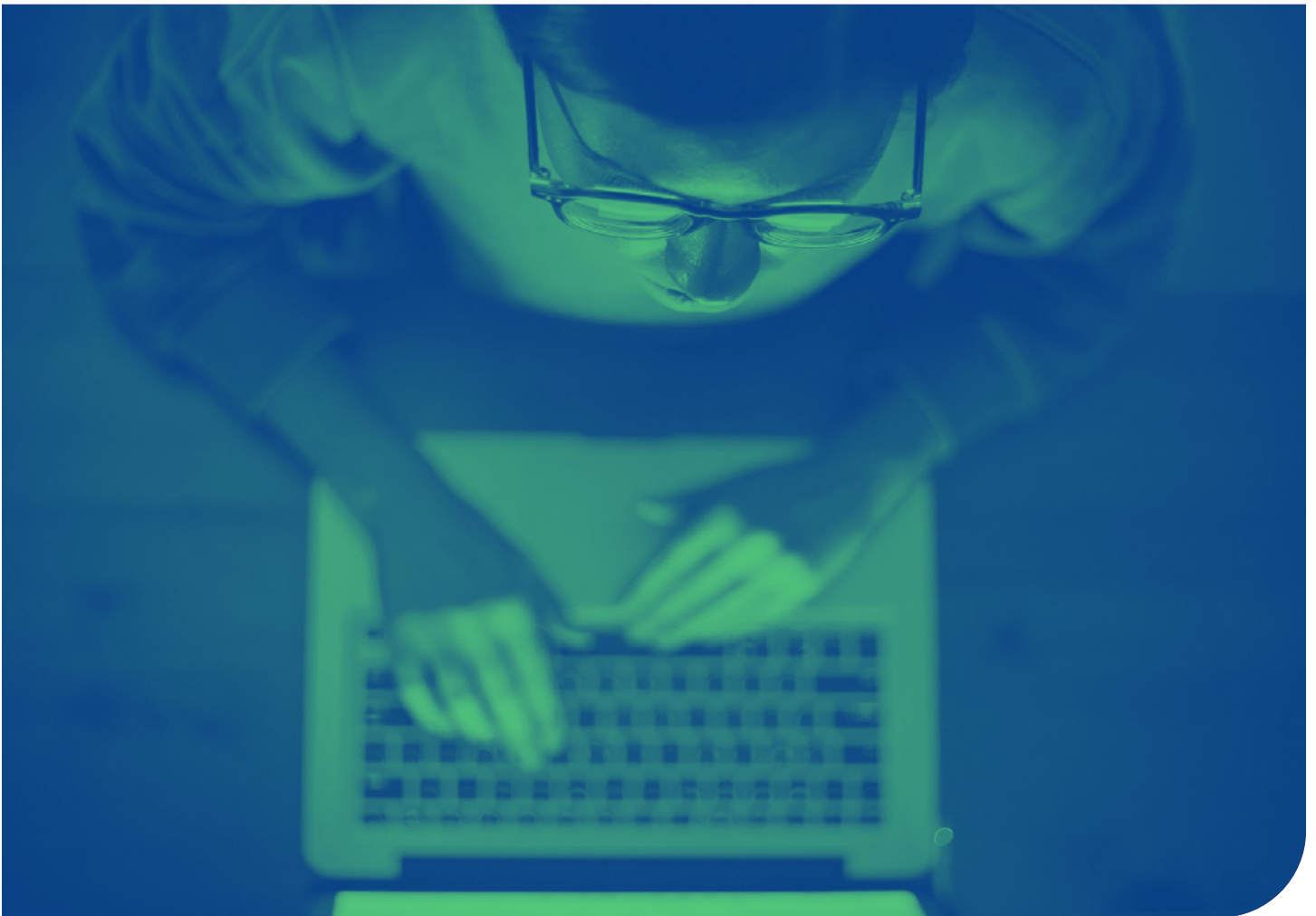
Direction: Indicates whether the relationship with the dependent variable is positive (an increase in the predictor leads to an increase in the outcome) or negative (an increase in the predictor leads to a decrease in the outcome).

Magnitude: Reflects how much the dependent variable is expected to increase or decrease when the predictor variable increases by one unit, assuming other variables in the model are held constant.

- **Moderation by Loneliness:** When examining the moderating effects of loneliness, levels of high, low, and medium loneliness are defined as the Mean plus or minus one standard deviation (Mean +1 SD, Mean -1 SD). This allows us to assess how the relationship between variables differs across these levels of loneliness.



Key Findings





Key Findings

Definition of Terms

In our survey, we explored various modes of video gaming engagement among participants. The following classifications are used throughout this report to delineate the distinct aspects of gaming:

Location of Play

Remote: Engaging in online games with others who are physically distant.

Local: Participating in games in a shared physical space with at least one other person.

Type of Play

Single-Player: Playing alone, not interacting with others.

Two-Player: Gaming with one other individual, which may include elements of competition or cooperation.

Multiplayer: Playing within a group setting with more than two participants, encompassing both competitive and cooperative dynamics.

Relationship with Play Partner(s)

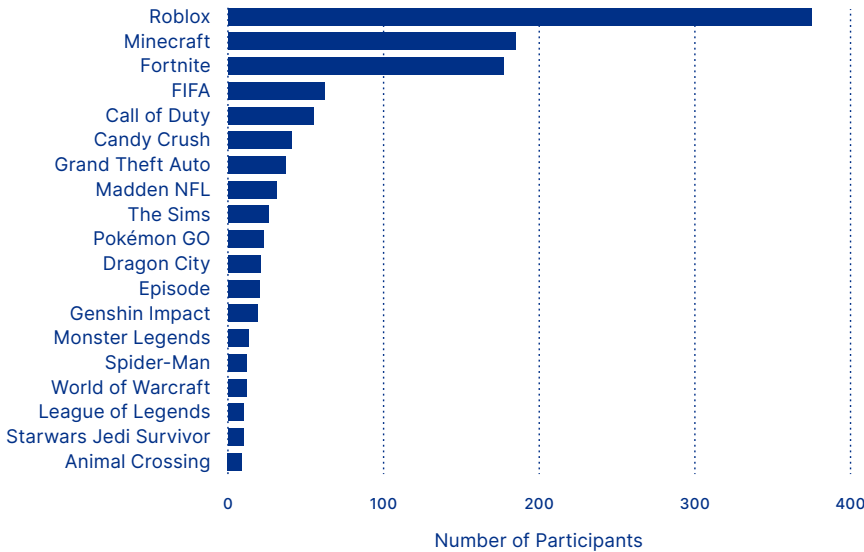
Friend(s)/Family: Includes gaming with known individuals such as friends, family members, or acquaintances, regardless of whether they were initially met online.

Stranger(s): Involves playing with individuals who are not previously known to the player, often paired through in-game matching systems.

Gaming Times and Device Preferences

Approximately 93% of participants reported playing video games in the last month and were included in our analysis. On a typical school day, the study participants indicated they spent on average 2 hours and 51 minutes gaming on portable devices (such as smartphones, tablets, and Nintendo Switch) and 2 hours and 12 minutes on non-portable devices (such as PCs, laptops, PlayStations, and Xboxes). During non-school days, the average gaming duration rose to an average of 4 hours and 6 minutes on portable devices and about 3 hours and 12 minutes on non-portable devices.

Favorite Games Among Adolescents



The top five games among participants are online multiplayer games.

ROBLOX

MINECRAFT

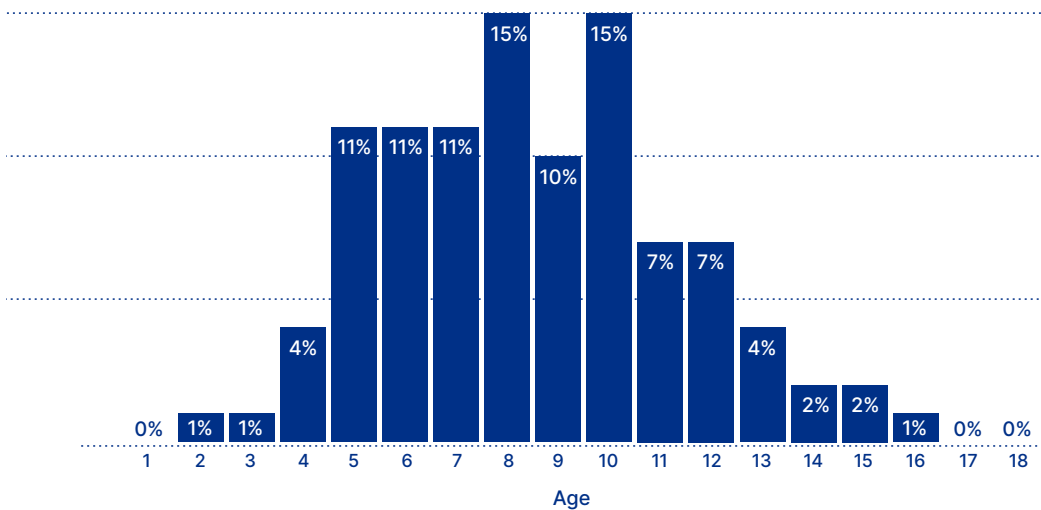
FORTNITE

FIFA

CALL OF DUTY

Note: Participants were asked to provide the name of their favorite game. Similar responses and different games in the same series were combined. Only games favored by at least 10 participants were included in the figure.

Starting Age for Video Gaming Among Adolescents

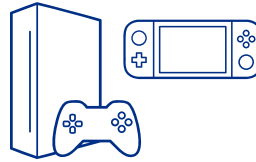


More than half (62%) of participants said they started gaming between 6 to 10 years old, compared to roughly one-quarter (22%) who began between 11 to 17, and 17% who began before the age of 5.

Gender-Based Differences in Gaming Time and Devices



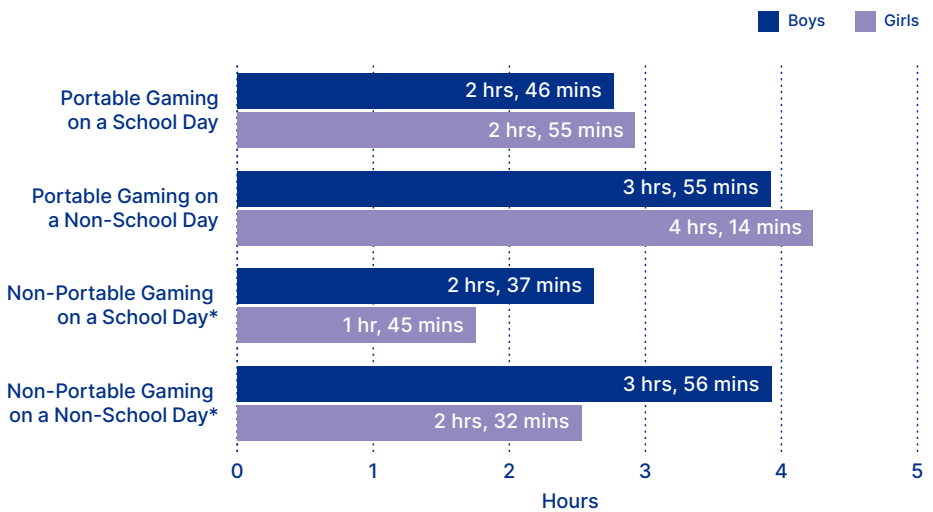
Girls spend more time gaming on **handheld / portable devices**



Boys divide their time more evenly between **portable** and **non-portable devices**

On average, girls engaged in gaming on portable devices for longer than boys, logging about 2 hours and 55 minutes on school days and 4 hours and 14 minutes on non-school compared to boys' 2 hours and 46 minutes on school days, and 1 3 hours and 55 minutes on non-school days. In contrast, boys devoted more time to non-portable devices, with 2 hours and 37 minutes on school days and 3 hours and 56 minutes on non-school days, significantly outpacing girls who spent 1 hour and 45 minutes and 2 hours and 32 minutes, respectively.

On a typical day, how much time do you spend playing video games on the following types of devices?



Age-Based Differences in Gaming Time and Devices

Younger and older adolescents did not differ in the time they spent on portable or non-portable devices.

Social Interactions During Gaming: Who, Where, and How

Gaming Frequency and Partners

> 60% of teens

reported playing single-player and social games weekly

~7 in 10 teens

reported playing online games with strangers at least once a week

Using a 5-point scale—ranging from never, rarely, sometimes, often, to almost always—the data reveals distinct patterns in gaming behavior.

Social Gaming includes several types of interactions (with frequency measured using a 5-point scale—ranging from never, rarely, sometimes, often, to almost always):

Two-Player Games: 76% of participants engaged in two-player games with friends/family, and 69% with strangers, selecting “sometimes” or more often as their frequency.

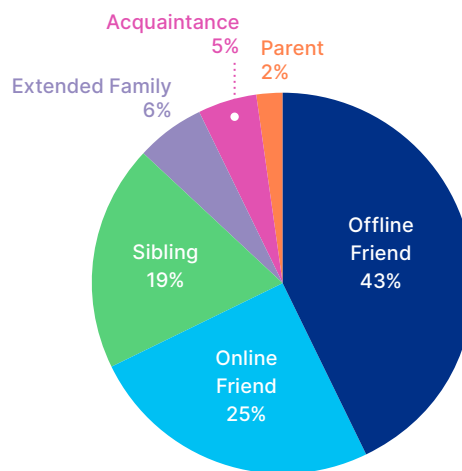
Multiplayer Games: 72% played multiplayer games with friends/family, while 66% did so with strangers at least “sometimes”.

Local Play: In scenarios where players share the same physical space, 70% participated in one-on-one sessions and 62% in group sessions, both at a frequency of “sometimes” or more often.

Solo Gaming: 78% of teens engaging in single-player modes at least “sometimes” in a regular week.

When asked whom they typically play with during two-player online gaming sessions with friends/family, nearly half (43%) of respondents reported playing with a friend they know offline. In multiplayer games, participants typically played with friends they know offline (67%), friends they know from online (52%), and siblings (47%).

When you typically play online with one person you know, who are they?



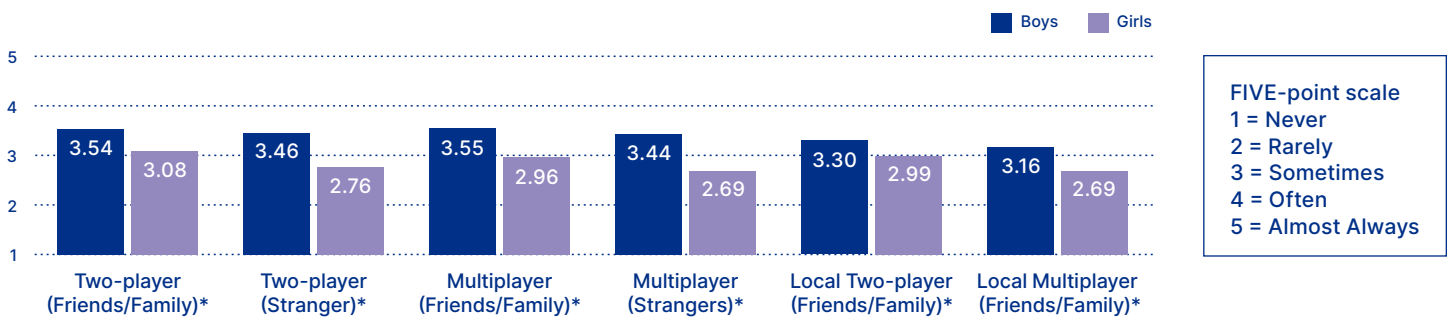
Gender Differences: Gaming Partners for Remote Co-Play

Boys played social games more frequently than girls — whether remote or local, in both two-player or multiplayer formats, and with friends/family or strangers.

Though both boys and girls typically play online games with offline friends, boys are more likely to play with **online friends**, while girls more often select **family members** as their gaming partners.

Boys reported playing with others significantly more frequently than girls, whether remotely or locally, in two-player or multiplayer, and with friends/family or strangers.

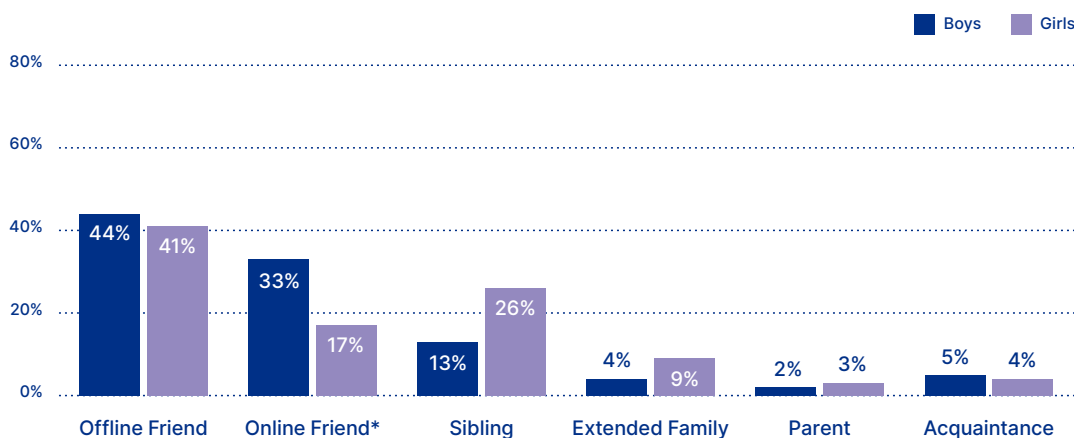
How often do you engage in the following types of play?



*When applicable, statistically significant differences are indicated with an asterisk.

Boys and girls differed in who they played with during two-player online gaming. While a similar percentage of boys (44%) and girls (41%) typically played with an offline friend, significantly **more boys (33%) than girls (17%) said they primarily played with a friend they met online**. In contrast, more girls played with family members than did boys: 26% played with a sibling (vs. 13% of boys), 9% with an extended family member (vs. 4% of boys), and 3% with a parent (vs. 2% of boys).

When you typically play online with someone you know, who are they?



*When applicable, statistically significant differences are indicated with an asterisk.

Patterns of gender differences for remote two-player gaming were similar to those for online multiplayer sessions. A majority of both girls (71%) and boys (63%) typically played with friends they know offline, but **significantly more boys (62%) than girls (41%) played primarily with online friends**. Significantly more girls selected family members as their gaming partners than did boys: 56% often played with a sibling (vs. 39% of boys) and 31% with an extended family member (vs. 18% of boys). Girls and boys were comparable in terms of their play with parents (10% of girls vs. 12% of boys) and acquaintances (19% of girls vs. 14% of boys).

Age-Based Differences: Gaming Partners for Remote Co-Play

Across age groups, there are no significant differences in the frequency of various types of play, including playing alone, multiplayer gaming, and same-room co-play. However, younger players engage more frequently in two-player games, both with strangers and friends/family.

There were no significant differences in the frequency of various types of play, including playing alone, online multiplayer games with strangers and friends/family, or local co-play, across age groups. However, the younger group did exhibit a significantly higher frequency of engaging in two-player games, both with strangers ($M= 3.2$ vs. 3.01) and with friends/family ($M= 3.41$ vs. 3.21). In both two-player and multiplayer games with family and friends, younger and older groups reported similar patterns in gaming partners.

Loneliness, Gaming Frequencies, and Partners

Loneliness correlates with increased engagement in multiple types of gameplay activities, with the link between loneliness and increased gaming activity appearing stronger in lonely boys compared to lonely girls.

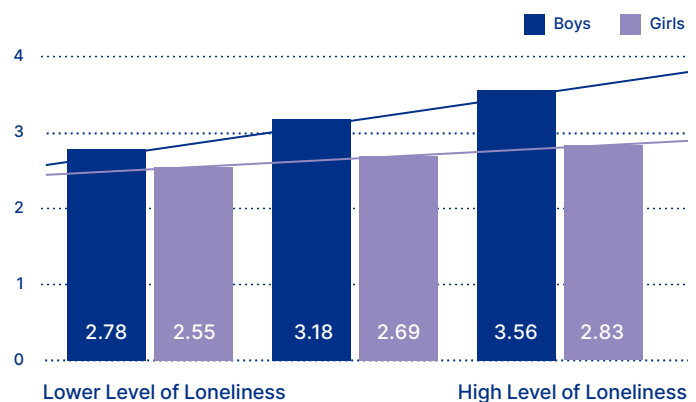
Loneliness was a significant predictor of different gaming activities, after controlling for age and gender:

- Playing alone ($\beta = .18^{***}$),
- Playing in two-player games with a stranger ($\beta = .17^{***}$) and with friends/family ($\beta = .16^{***}$),
- Participating in multiplayer games with strangers ($\beta = .18^{***}$) and with friends/family ($\beta = .13^{***}$),
- Playing in local two-player ($\beta = .21^{***}$) and local multiplayer games ($\beta = .22^{***}$).

Gender-Based Differences in Loneliness and Gaming Partners

There were distinct differences in how loneliness correlates with gaming behaviors between girls and boys. Specifically, the relationship between perceived loneliness and various types of play were stronger for boys than girls. These included two-player games with a stranger, multiplayer games with friends/family, and local play both solo and with multiple others (see an example below). **Overall, boys were more likely to engage in these types of gaming activities compared to their female counterparts.**

Moderating Role of Gender on the Relationship Between Loneliness and Gaming Behaviors



Age-Based Differences in Loneliness and Gaming Partners

There were differences in the levels of reported loneliness between older and younger adolescents. Specifically, older children reported significantly ($p < .001$) higher levels of loneliness (Mean = 2.89) compared to their younger counterparts (Mean = 2.68). Despite these differences in reported loneliness, there were no significant differences in the relationship between loneliness and gaming activities comparing older and younger groups.

Communication During Remote Co-Play

Teenagers more frequently engage in **real-time conversations with friends/family** than with strangers during online gaming sessions.

Teenagers mainly use **in-game chat** to talk to other people during games, but many of them also use **phone calls** and **other chat platforms**.

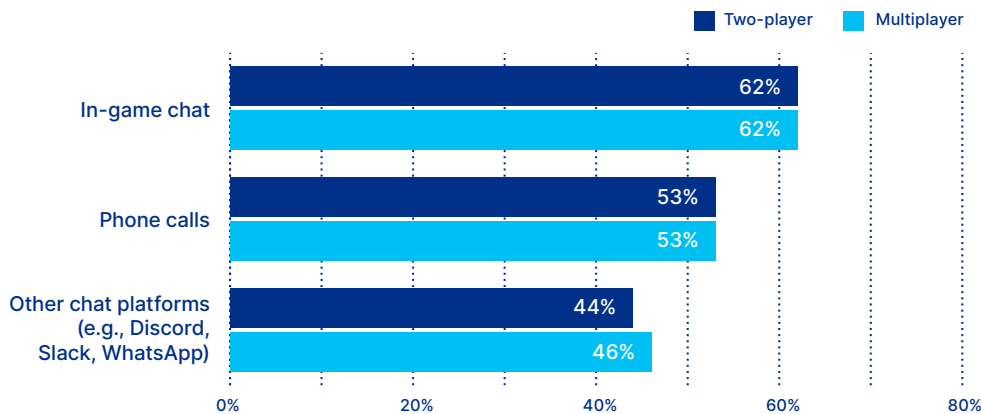
1 in 2 teens reported often or almost always having **extended real-time conversations with friends/family** in online gaming sessions.

1 in 3 teens reported often or almost always having **extended real-time conversations with strangers** in online gaming sessions.

Platforms Used for In-Game Communication

Most teens reported using in-game chat to communicate continuously during both two-player and multiplayer gaming (62% each), but many also used phone calls (53% each for two-player and multiplayer) and other chat platforms (44% for two-player, 46% for multiplayer).

When having an extended/real-time conversation online while gaming with someone/some people you know, which platform(s) do you use? *(check all that apply)*

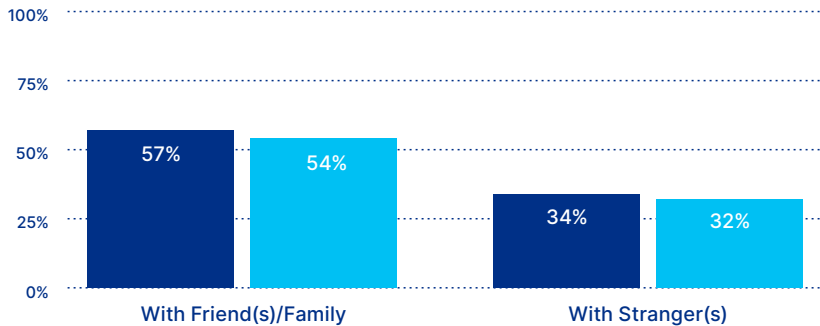


In-Game Communication Patterns: Continuous vs. Brief Communication

The majority of teenagers reported having real-time or extended conversations frequently (i.e. often or almost always) with friends/family during two-player (57%) and multiplayer (54%) gaming. A notable portion also had these types of conversations with strangers (34% during two-player and 32% during multiplayer games).

How often do you have an extended conversation and/or communicate in real-time?

(percentage responding “often” or “almost always”)



Whether playing with a friend/family member or a stranger during two-player gaming sessions, similar numbers (41%) of teenagers frequently used quick messages, emojis, or in-game character actions for brief communication. During multiplayer games, 39% of players frequently engaged in this type of brief communication with friends/family, compared to 35% when playing with strangers.

Gender-Based Differences in Communication During Remote Co-Play

Boys generally **engage in communication more frequently** than girls across all gaming contexts, particularly during interactions with strangers.

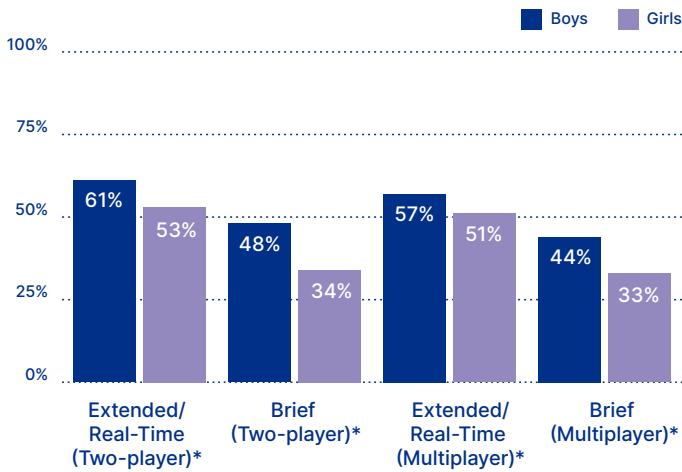
About **1 in 2 boys**, compared to **1 in 4 girls**, reported engaging in **extended real-time conversations with strangers** in two-player games.

Boys are more likely to utilize a **wider range of communication tools**, while girls report using cell phones more frequently.

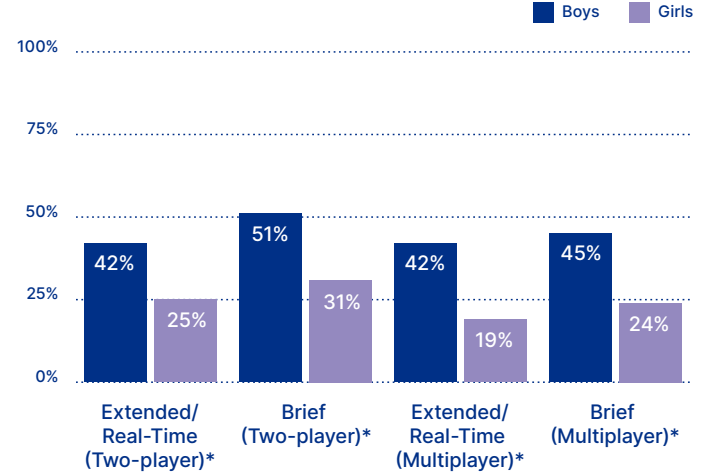
Boys and girls differed in their communication during gameplay, with boys more frequently (“often” or “almost always”) engaging in both real-time/extended and brief communication across all contexts. This difference was particularly notable when interacting with strangers, where boys consistently reported communicating with them more often than girls; for example, **extended conversations were significantly more common for boys than girls during two-player gaming with strangers (42% of boys vs. 25% of girls).**

Gender Differences in In-Game Communication Patterns

Type of Communication During Play: Friends/Family



Type of Communication During Play: Strangers

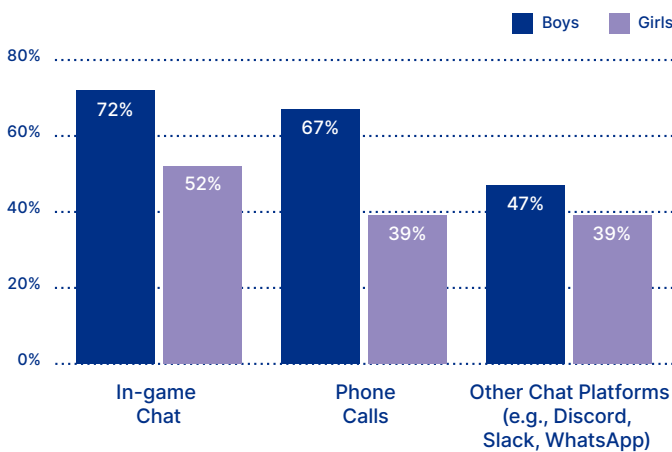


*When applicable, statistically significant differences are indicated with an asterisk.

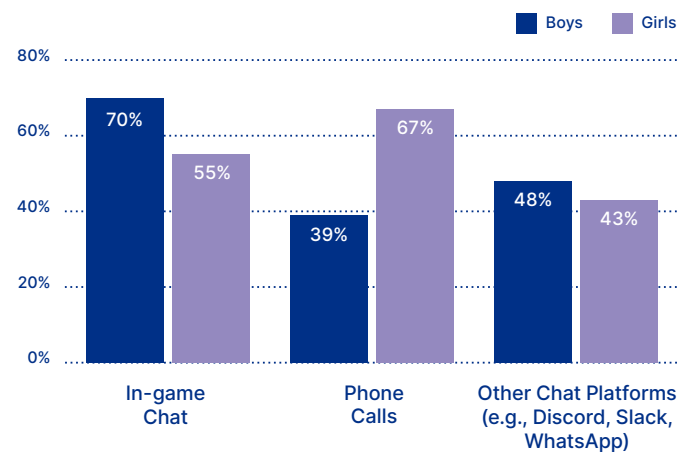
During two-player gaming with friends/family, a **larger portion of boys than girls used in-game chat** (72% of boys vs. 52% of girls), phone calls (67% of boys vs. 39% of girls) and other chat platforms (47% of boys vs. 39% of girls). During multiplayer gaming with friends/family, a majority of both boys (70%) and girls (55%) used in-game chat for real-time/extended communication with gaming partners, followed by **phone calls (39% of boys vs. 67% of girls)** and other platforms (48% boys vs. 43% girls).

Gender Differences in Platforms Used for In-Game Communication

Platforms Used for Communication with Friends/Family During Two-Player Gaming



Platforms Used for Communication with Friends/Family During Multiplayer Gaming



Age-Based Differences in Communication During Remote Co-Play

In online gaming, communication patterns between younger and older kids are generally similar across various settings.

Younger teens more frequently used quick communication to talk to strangers while playing multiplayer games than older teens.

In online gaming settings, there were generally no significant differences between younger and older kids in terms of how frequently they used real-time and quick communication. However, a notable exception occurred in multiplayer games with strangers, where a higher percentage of younger kids (38%) reported frequently engaging in quick communication ('sometimes' or 'more often') compared to 33% of older teens.

Younger teens were more likely to use in-game chat than older teens, with 66% of younger teens using it compared to 59% of older teens. These differences were statistically significant. However, the usage rates of other communication platforms, such as phone calls or other chat services, were similar across both age groups.

Loneliness and In-Game Communication

Lonelier teens communicated more frequently with their gaming partners, particularly when playing with strangers.

Links Between Loneliness and Communication Methods in Different Social Gaming Settings

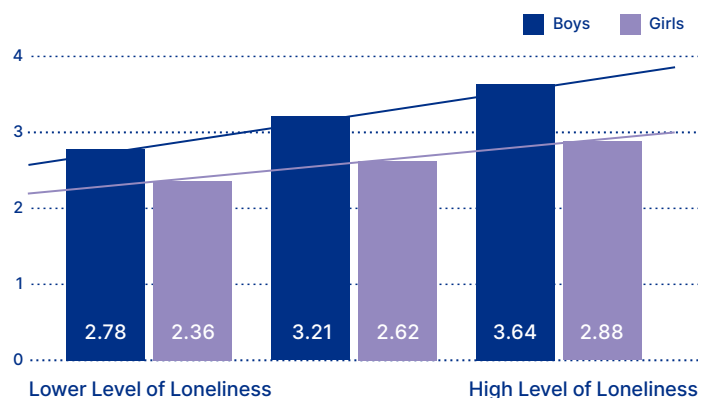
DIFFERENT GAMING SCENARIOS	OUTCOME VARIABLES	
	Extended/Real-Time Communication β	Brief Communication β
Loneliness as the Predictor		
Two-player games with a stranger	.30***	.39***
Two-player games with friends/family	.08*	.22***
Multiplayer games with strangers	.28***	.27***
Multiplayer games with friends/family	.13***	.24***

 = Types of gaming most strongly correlated with loneliness.

Gender-Based Differences in Loneliness and In-Game Communication

We observed distinct differences in the associations between loneliness and in-game communication behaviors for boys and girls. For example, in two-player games involving strangers, loneliness had a stronger association with extended communication for boys compared to girls. **Our findings suggest that lonelier boys were more likely than girls to engage in communication with others, especially continuous conversation with strangers in two-player games.**

Moderating Role of Gender on the Relationship Between Loneliness and In-Game Communication

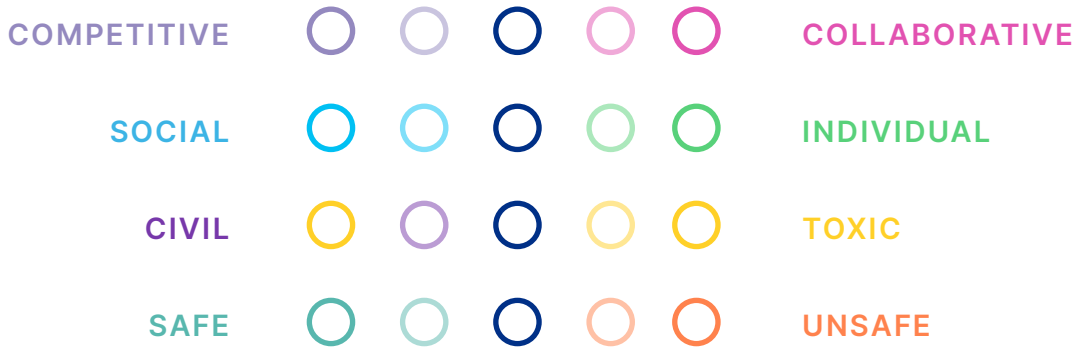


Age-Based Differences in Loneliness and In-Game Communication

Our analysis showed that the relationship between perceived loneliness and engagement in various gaming interactions did not differ significantly by age. Both older and younger players exhibited similar patterns in how loneliness is associated with their social interactions across different gaming contexts.

Social Gaming Experiences

To better understand teens' social gaming experiences, they were asked to rate their experiences with different types of game play using paired sets of opposite adjectives (e.g., safe vs. unsafe; civil vs. toxic). The figure below gives some examples.



**Note: Responses on these differential scales (e.g., competitive vs collaborative, social vs individual) were coded based on their proximity to the opposing sides. For each scale, the two responses closest to each side were coded under that descriptor (e.g., competitive, social), while the middle responses were coded as "Neutral".*

More than two-thirds of teens rated their social gaming experiences as positive (vs. negative), civil (vs. toxic), and safe (vs. unsafe).

However, 1 in 5 participants reported a toxic experience when playing with strangers in multiplayer games, and 1 in 6 participants reported an unsafe experience under the same conditions.

For every type of game play, positive experiences outweighed negative ones, with each specific type being rated by a majority of respondents as safe (vs. unsafe), civil (vs. toxic), or positive (vs. negative). Most felt safe and civil when playing with friends/family (9% felt unsafe, 15% rated the experience as toxic), with lower ratings when playing with strangers (15% felt unsafe, 21% finding it toxic). Teens viewed playing with strangers as more competitive, while gaming with friends/family—especially in multiplayer settings—was seen as more collaborative (48% collaborative vs. 39% competitive). Participants generally rated gaming with friends/family as more social than gaming with strangers.

Gender-Based Differences in Social Gaming Experiences

Boys viewed two-player and multiplayer gaming as more unsafe, toxic, and competitive than did girls.

22% of boys view gaming sessions with a stranger as toxic, compared to 16% of girls.

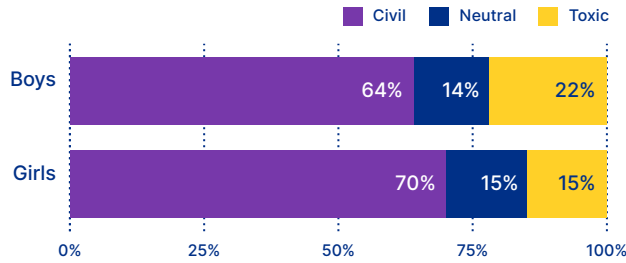
Girls are more likely to view interactions with strangers as individual (vs. social) compared to boys.

Boys more often view online gaming environments as unsafe compared to girls: 13% of boys view multiplayer gaming with friends and family as unsafe, compared to about 6% of girls.

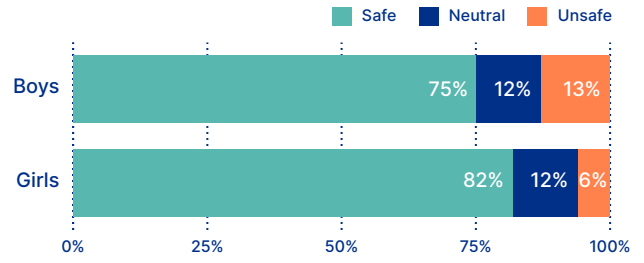
Gender Differences in Gaming Perceptions: Remote Co-Play

Safety and Civility: Boys were more likely than girls to view gaming as unsafe and toxic. Boys also perceived playing with strangers as more toxic, with 22% of boys versus 15% of girls rating both two-player and multiplayer games as toxic.

Two-Player Gaming with Friends/Family
Gender Difference — Civil vs. Toxic

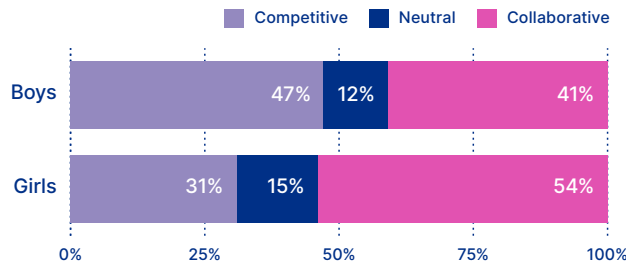


Multiplayer Gaming with Friends/Family
Gender Difference — Safe vs. Unsafe

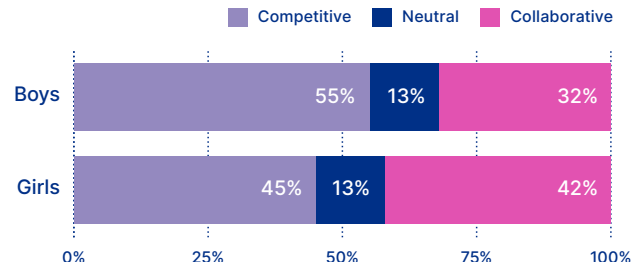


Competitive vs. Collaborative: Boys were more likely to view gaming as competitive, with 53% seeing two-player games with friends/family and 62% seeing play with strangers as competitive, while girls were more likely to view these interactions as collaborative, with 51% in two-player sessions and 54% in multiplayer games with friends/family perceiving them as such.

Multiplayer Gaming with Friends/Family
Competitive vs. Collaborative

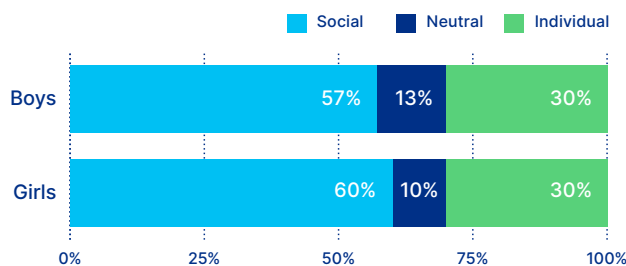


Multiplayer Gaming with Strangers
Competitive vs. Collaborative

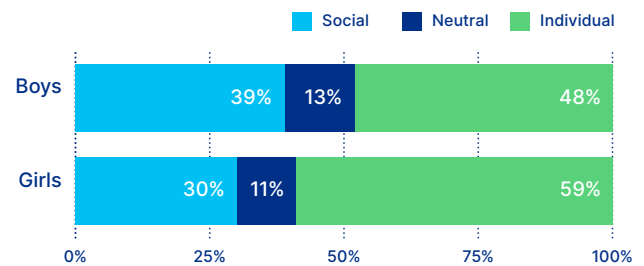


Social vs. Individual: Both boys and girls generally rated two-player and multiplayer gaming with friends/family as social. However, boys were more likely to find playing with strangers social, while girls saw it as more individual.

Multiplayer Gaming with Friends/Family
Social vs. Individual



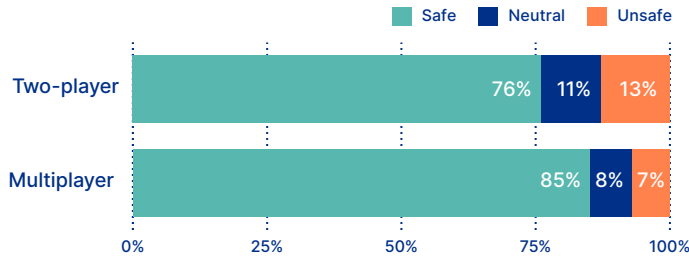
Multiplayer Gaming with Strangers
Social vs. Individual



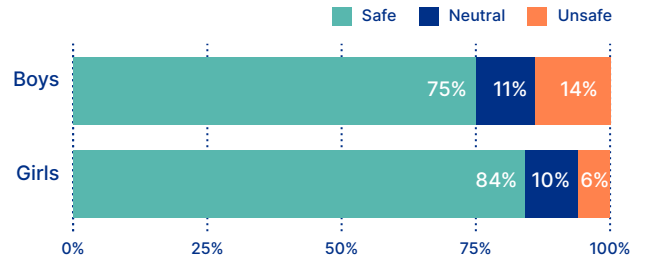
Gender Differences in Gaming Perceptions: Local Play

Safety and Civility: While the majority of teens considered local two-player and multiplayer gaming to be safe, boys were more likely than girls to perceive these settings as unsafe.

Local Two-Player Gaming
Safe vs. Unsafe

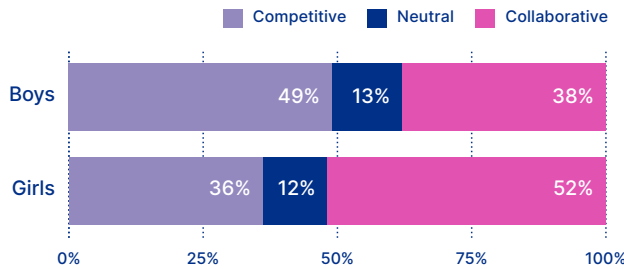


Local Multiplayer Gaming
Safe vs. Unsafe

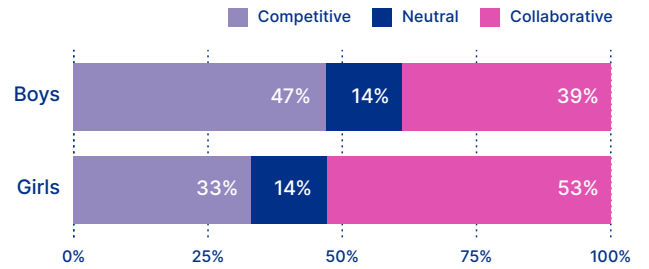


Competitive vs. Collaborative: Significantly more boys than girls said that their local game play was competitive, while more than half the girls rated these types of game play as collaborative.

Local Two-Player Gaming
Competitive vs. Collaborative

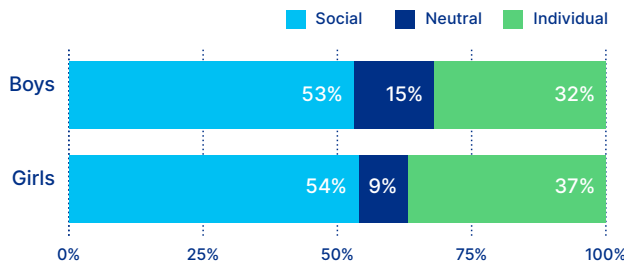


Local Multiplayer Gaming
Competitive vs. Collaborative

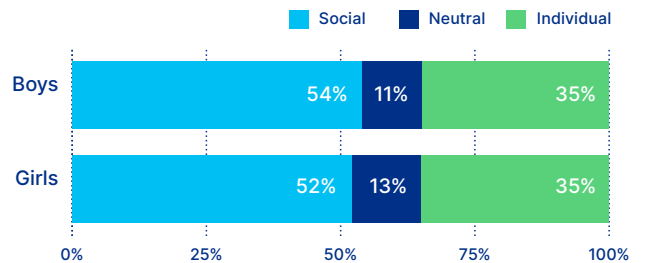


Social vs. Individual: The majority of both girls and boys rated their play as more social than individual in local play.

Local Two-Player Gaming
Social vs. Individual



Local Multiplayer Gaming
Social vs. Individual



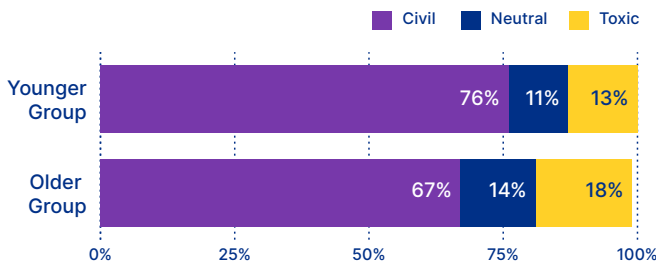
Age-Based Differences in Gaming Perception

Younger children consistently report more positive perceptions of all gaming contexts, describing them as more social, civil, safe, and positive compared to older kids.

Significantly more younger children rated both two-player and multiplayer games, whether with strangers or known individuals, remote or local, as social, civil, safe, and positive compared to older adolescents.

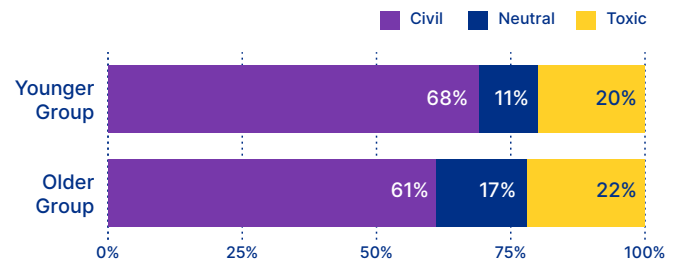
Multiplayer Gaming with Friends/Family

Age Difference — Civil vs. Toxic



Multiplayer Gaming with Strangers

Age Difference — Civil vs. Toxic



Loneliness and Gaming Experiences

Lonelier teens viewed gaming as more competitive, toxic, unsafe, and negative.

Loneliness was consistently associated with various negative perceptions of the gaming experience across different settings, including both remote and local co-play. Lonelier teens were more likely to perceive gaming as competitive, toxic, unsafe, and negative, regardless of whether they were playing with strangers or with friends and family.

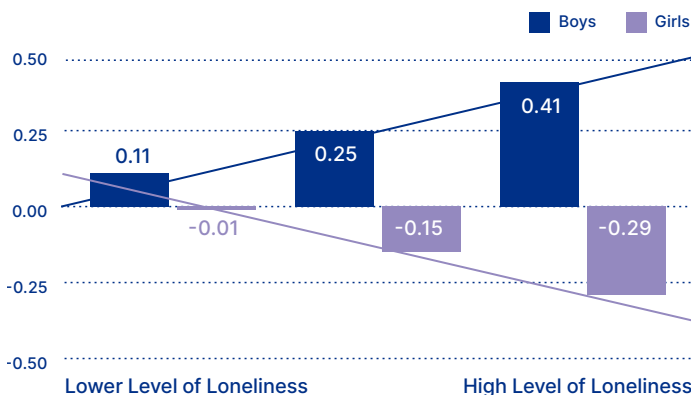
Gender-Based Differences in Loneliness and Gaming Experiences

Significant gender differences were observed in the relationship between loneliness level and perceived socialness in games with strangers. **As loneliness increased, boys exhibited a greater perception of gaming with strangers as social**, whereas girls showed the opposite trend: the lonelier they felt, the less they perceived these gaming experiences as social. The more lonely they were, the less they saw gaming with strangers as social.

Moderating Role of Gender on the Relationship between Loneliness and Gaming Experiences

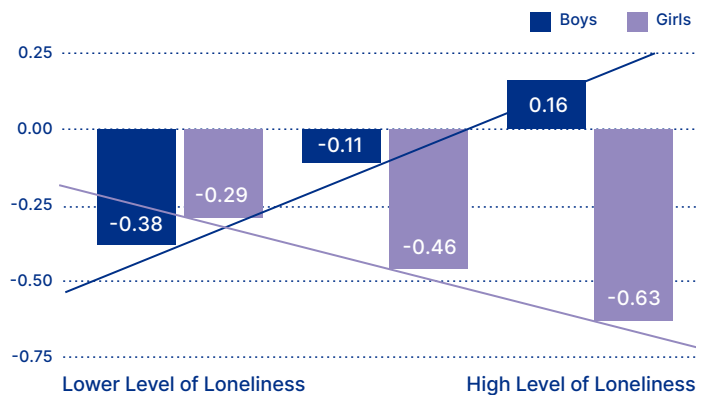
Two-Player Gaming with Strangers

Gender Difference: Loneliness and Social Experience



Multiplayer Gaming with Strangers

Gender Difference: Loneliness and Social Experience



Note: Y-axis: -2 represents "Individual" and 2 represents "Social".

Age-Based Differences in Loneliness and Gaming Experiences

Older and younger teens differed in their perceptions of toxicity in gaming environments when playing with family and friends. Specifically, younger gamers who reported higher levels of loneliness also reported more increased perceptions of toxicity during online gaming with family and friends. This trend was observed in both two-player and multiplayer scenarios.



Conclusion





Conclusion

General Gaming Behaviors

A Core Component of Teen Life

The results from our survey underscore the significant role video gaming plays in the daily lives of teenagers, particularly as a means for social interaction. Although we did not specifically target gamers, 93% of our participants reported playing video games at least once in the past month. Many began gaming in childhood and have continued the habit, frequently engaging in both solo and social play across various devices. Notably, the most popular games among our respondents — Roblox, Minecraft, Fortnite, FIFA, and Call of Duty — are all online multiplayer games, emphasizing gaming's role as a major platform for social interaction and connection.

Gender Differences: Girls Opt for Portability in Gaming Devices

Overall, girls predominantly played on portable devices, while boys distributed their gaming time more evenly across portable and non-portable devices, using non-portable devices significantly more than girls.

Based on these observed differences, boys may prefer the immersive experiences typically associated with consoles and PCs, including larger screens, more precise controls, and enhanced multiplayer features (e.g., integrated voice chat, skill-based matchmaking), found on consoles and computers. On the other hand, girls' use of portable devices may reflect a different approach to gaming that emphasizes convenience, casual, and individual play. Handheld devices, particularly smartphones and tablets, allow gaming to be more accessible and discreet, suggesting that girls may view gaming as a more flexible, secondary activity rather than a primary competitive pursuit or identifier (i.e., seeing themselves as “gamers”) (Duggan, 2015).

Age-Based Differences: Consistent Gaming Habits Across Age Groups

Our analysis showed no significant variation in the time spent gaming between younger and older teens, whether on portable/non-portable devices or school days/non-school days. Given that most teenagers started playing video games during childhood, it is likely that their gaming habits are well-established by early adolescence and remain relatively consistent as they grow older.

Social Interactions During Gaming

Expanding Beyond Local Communities

Our survey highlights the popularity of social gaming among teenagers, with approximately 70% of participants playing online games with both strangers and friends/family at least once a week. The high level of engagement with strangers illustrates the social and global nature of modern gaming, where interactions are not confined to local or known community members but extend to a broader, more diverse network.

Gender Differences: Boys Engage More with Strangers, Girls Stick to Friends and Family

- Boys frequently engage in social gaming with a diverse range of partners, including friends, family, and strangers. This suggests that boys are less selective about who they play with, using gaming platforms for social exploration. Their tendency to play with people they meet online and to refer to them as “online friends” (rather than “acquaintances”) might also demonstrate a broader, more inclusive definition of friendship compared to girls. Considering that more youth report negative experiences when interacting online with people they do not know, this gaming pattern may expose boys to higher levels of risk in these situations.
- Girls are more likely to play with family and friends which could reflect a more cautious approach to online engagements and/or a different set of expectations and experiences around gaming. Since girls play video games significantly more often with family members than boys do, this platform may provide them with opportunities to maintain close relationships with siblings and parents throughout adolescence.

Age-Based Differences: Younger Teens Favor Two-Player Games

While our data show no significant age-related differences in the frequency of various types of gaming, younger players did engage more frequently in two-player gaming with both strangers and friends/family; these more intimate environments may help younger teens build social skills in a more controlled and manageable setting.

Communication During Gaming

Real-Time Chat Common but Potentially Risky

Real-time communication is common in online gaming, often driven by the needs of teamwork and strategy in multiplayer games. We found that half of our participants frequently engaged in real-time conversations with friends and family, while about one-third also actively communicated with strangers. Although engaging with strangers can also be an opportunity to meet and interact with people from different backgrounds and cultures it may also open up risks associated with exposure to inappropriate content, harassment, or exploitation.

While teenagers primarily communicate during gaming through in-game chat, this chatting is supplemented by phone calls and other chat platforms. It is common for conversations to initiate within the gaming environment and continue on different platforms. This cross-platform communication phenomenon highlights the need for collaborations between different platforms to enhance safety measures and safeguard adolescents more effectively.

Gender Differences: Boys are More Active Communicators

Boys are more active communicators than girls during online gaming, especially with strangers: half of boys reported engaging in extended conversations with strangers in two-player games, which was double compared to the rate among girls. Communicating with strangers in this way could put boys at elevated risks for negative experiences. In contrast, girls' predominant use of cell phones might indicate a preference for more personal and secure communication methods that could limit such risk.

Consistent In-Game Communication Patterns Across Age Groups

Communication was generally consistent across age groups during online gaming, although younger teens were more likely to engage in brief communication (e.g., instant messaging) when interacting with strangers in multiplayer games. This briefer communication style may reduce the intimacy of interactions compared to real-time extended conversation, potentially lowering their risk of negative or unsafe encounters with strangers.

Gaming Experiences

Positive Overall, but Toxicity and Safety Concerns Remain

While a substantial majority of teenagers reported positive gaming experiences, it's notable that toxic and unsafe encounters remain fairly prevalent, affecting 20% of boys and 16% of girls during interactions with strangers. This underscores the complex nature of online gaming environments, especially those with strangers, where interactions can range from highly positive to potentially harmful.

Gender Differences: Boys See Competition, Girls Seek Collaboration

Competitive vs. Collaborative: The difference in how boys and girls engage in gaming and how they perceive their experiences appear consistent with established socialization patterns. In their broader lives, boys tend to be encouraged to value competition, while girls are often urged to behave in more collaborative ways. As reported in this survey, boys' and girls' perceived experiences with online gaming reflect these patterns of socialization that are common in offline space. There are opportunities here for both game designers and parents to provide and choose games that run counter to stereotypical gender development to provide a more complete and flexible experience in this space.

Individual vs. Social Interactions: Girls' tendency to view interactions with strangers as individual rather than social may, again, suggest a more cautious approach to socializing in online gaming that may stem from a heightened awareness of online risks and/or a preference for establishing deeper connections. Girls may also prioritize safety and the quality of interpersonal relationships over the competitive aspects of play, which tend to be more emphasized by boys.

Age-Based Differences: Younger Players Report More Positive Experiences

Younger players reported more positive online social gaming experiences indicating that this space could be less problematic for these younger teens. Exactly why they are having better experience is unknown, but it may reflect a less complex and strife filled social environment during early adolescence. More work should explore the explanations for this difference with the goal of informing game designers about how to create games that stretch the positive experiences as far into the later teenage years as possible.

Loneliness and Gaming

A Complex Relationship

Our findings indicate that lonelier teenagers engage in various types of gaming significantly more often and communicate more actively with their gaming partners, especially with strangers. It is possible that online social games appeal to lonely teens – they provide social experiences where the youth might not otherwise have them. Our survey, however, does not support the idea that playing these games contributes to less loneliness. Research should continue to investigate potential ways for social games to serve as spaces of connection and belonging so as to educate youth and encourage designers to create spaces that might combat loneliness.

Gender Differences: Boys Turn to Gaming More than Girls to Cope with Loneliness

Overall, boys demonstrated a stronger association between loneliness and gaming compared to girls. They also participated in extended communication with strangers more than girls. As adolescent boys' socialization often emphasizes competition and personal achievement, competitive gaming environments might be especially appealing to those seeking social validation and a sense of success that they may feel is lacking in other areas of their lives. It may also make these spaces particularly difficult places to find meaningful connection and support. Considering that boys are open to communicating in social games with people they do not know, opportunities exist to create or fine-tune social gaming spaces that encourage teen boys to interact in safe, noncompetitive ways.

Age-Based Differences: Older Teens Report Higher Levels of Loneliness

Older adolescents reported higher levels of loneliness than their younger counterparts – a common finding consistent with adolescent development. Despite these differences in reported loneliness, there were no significant differences in the relationship between loneliness and gaming activities comparing older and younger groups. Considering the fairly narrow age range (13- to 17-year-olds), more research should explore if younger children use and experience these games in ways that are different from how teenagers do.

Loneliness, Increased Game Play, and Negative Perceptions

There is a positive relationship between increased levels of loneliness and both higher engagement in gaming and more negative perceptions of gaming experiences. If lonely teens are seeking connection through this game play, it appears that the spaces are not providing the type of environment that aligns with supportive and positive interactions. Competition in these games may further the gulf between expectations/desires and the reality of the spaces. While parents need to recognize that these spaces may not be providing positive social experiences for their children, designers of these spaces should work toward reducing the negativity and toxicity present on their sites.

Overall, our findings suggest that loneliness and gender play a significant role in shaping how adolescents engage with and experience video games. Teens who experience higher levels of loneliness are more likely to seek out social gaming environments, especially for boys. However, the quality of these online experiences varies greatly, and the reliance on gaming for social interaction does not always alleviate loneliness. Our results highlight the need for intentional efforts to create more supportive and safe gaming spaces that foster meaningful connections and mitigate the risks of toxicity and harm. As we look ahead, it is crucial for parents, educators, game designers, and adolescents themselves to collaborate in ensuring that gaming serves as a positive outlet for social interaction and personal growth, particularly for those struggling with loneliness.



Recommendations



Recommendations for Industry

Based on our findings, the following recommendations aim to promote healthier and more prosocial outcomes within the industry.

Enhance Content Moderation and Incorporate Youth Feedback

The tendency for lonely boys to feel more socially engaged with strangers online could heighten their exposure to potential risks, such as negative or unsafe experiences, which can amplify their feelings of isolation and vulnerability.

- To safeguard these players, developers should focus on enhancing moderation systems to create safer online environments that cater to the diverse needs of all players, with particular attention to those at risk (Saldías, 2024). This can involve implementing robust moderation systems and community guidelines that actively discourage negative behaviors and promote positive interactions, as well as setting up mechanisms that allow for easy reporting and addressing of negative encounters.
- Importantly, platforms should consider implementing rigorous age verification processes to distinguish adults from minors within gaming communities predominantly inhabited by children and adolescents. Flagging adult accounts can alert younger players and their guardians about potential interactions, especially given the high prevalence of extended real-time conversations with stranger players.
- Lastly, involving youth gamers in the development of community guidelines and moderation processes can help ensure their needs and preferences are addressed. Given that 1 out of 5 participants reported a “toxic” experience, and 1 out of 6 reported an “unsafe” experience when playing with strangers in multiplayer games, gaining a sense of what bothers adolescent gamers can be crucial in developing effective guidelines.

Challenge Gender Norms through Game Design

To counteract stereotypical gender roles related to online game play, we recommend that game designers deliberately integrate both competitive and collaborative elements into their designs and allow players to choose their preferred style of play, enhancing the appeal and accessibility of games to a wider audience.

- **Existing Games:** Developers could introduce updates or expansions that incorporate new features. For example, adding cooperative mission modes to traditionally competitive games can attract players who prefer teamwork, while introducing competitive elements like mini-challenges or leaderboards in narrative-driven games can appeal to those who thrive on rivalry.
- **New Game Development:** We suggest designing games from the ground up with both competitive and collaborative elements in mind. Developers can plan for multiple pathways that allow players to switch between competitive and cooperative tasks based on their preferences or the needs of the game scenario.

Consider AI-Facilitated Virtual Playmates for Enhanced Social Interaction

One potential way to reduce young people's elevated risk that comes from interacting with strangers while providing them with spaces to practice social interactions is to develop virtual playmates into social gaming platforms:

- **Simulated Peer Engagement:** These playmates can be designed as actual play partners, mimicking peer-level gaming skills and interactions. This allows players to engage in social scenarios that might otherwise be daunting due to anxiety or lack of real-world experience. By ensuring that these interactions occur in more controlled, non-toxic environments, AI playmates have the potential to meet the social needs of gamers who might find engagements with strangers unpredictable and potentially unsafe (Kory-Westlund & Breazeal, 2019). Such carefully crafted interactions can be beneficial in building confidence and alleviating feelings of isolation among adolescents, particularly those who struggle with traditional social environments.

Recommendations for Parents and Caregivers

In addition to game designers, whose work impacts millions of young people, parents also have the opportunity to guide their children towards more beneficial experiences.

Actively Mediate and Encourage Open Communication

By engaging in conversations and discussions with their children about their gaming experiences, parents can help foster a healthy gaming environment. Parents can talk to their children about the types of games they are playing, who they are interacting with online, and why gaming is appealing to them. It is particularly important for parents to have these discussions with older adolescents, who reported more negative gaming experiences and higher levels of loneliness. Tailoring conversations to align with teens' developmental goals can help parents better support them as they navigate these challenges.

Take a Balanced View on Gaming and Institute Dynamic Restrictions

We recommend that parents adopt a balanced perspective on gaming, recognizing its potential to foster and maintain social relationships, while also being aware of possible risks. As shown by our findings, many kids find gaming sessions to be a fulfilling part of their social lives. Therefore, conversations about gaming should not aim to completely stop children from playing but rather to ensure that gaming is part of a healthy and balanced lifestyle. This attitude is particularly important given that striving for autonomy is a key developmental milestone during adolescence. If parents attempt to completely prohibit gaming—especially when most of their peers are actively engaged—adolescents may feel compelled to violate these restrictions.

Instead, we advise parents to monitor teens' gaming habits to ensure they do not interfere with other responsibilities, such as schoolwork, sleep, and offline social interactions. The positive relationship between frequent gaming and perceived loneliness observed in our study may indicate that those who are not thriving socially are more inclined to engage heavily in gaming. This fact can be a signal for parents that their child might be struggling with making friends or lacks sufficient social support. In such cases, it is crucial for parents to intervene by helping their children find new social settings, introduce them to new activities, or facilitate opportunities to develop friendships outside of the gaming environment.

In Conclusion

As we conclude this report, we reflect on the transformative potential of thoughtful, inclusive, and psychologically attuned game design and community management. The recommendations provided aim to foster safer, more engaging, and developmentally appropriate gaming environments that respect and respond to the diverse needs of adolescent gamers.



Appendix

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Boston Children's
Digital Wellness Lab

The Digital Wellness Lab at Boston Children's Hospital and Harvard Medical School seeks to understand and promote positive and healthy digital media experiences for young people, from birth through young adulthood.

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