



The Modern **Mobile** Gamer

A Study of Everything
2020

Presented by

 **ADCOLONY**
DISQO



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“Who are **mobile gamers**, exactly?”

It’s a question our teams have been asked since we first brought in-app gaming demand to the table almost a decade ago. Other apps had already been advertising in-app, almost since the birth of the App Store (we were there for that too!) but brands took some convincing, and sometimes still do.

So, who are mobile gamers?

We partnered with Disqo to answer that question in the most authentic and honest way possible. There’s a lot of data out there about who mobile gamers are, their gender, how much they make, all their normal slices, but rarely do two sources agree on everything. Disqo offered over 1200 consumer responses, one of the largest surveys of mobile gamers ever.

With these responses, we can truly put a magnifying glass on a channel and an audience that many advertisers and agencies have only recently begun to see as valuable. This magnifying glass has grown more important in recent months as American consumers are still at home or being rightfully cautious about going out, and gaming has had a large spotlight thrown on it. Mobile gaming has continued to grow during these times and looks set to continue into the future.

It’s not uncommon for people to think of “gamers” as underachieving millennial males living at home with their parents still, but nothing could be further from the truth. Mobile gamers skew almost even on gender, and many app categories like puzzle and word games skew heavily female. Income level and education will surprise you, as will the regional penchants for certain game categories. This study has something for everyone — whether you know nothing about mobile, or are just looking for additional research, there are insights that are fresh and exciting for advertisers, developers, and beyond.

We hope you find this study as valuable as we did.

Jonathan Harrop
Senior Director, Global Marketing
& Communications
AdColony



DISQO

“How are gaming and market research similar?”

While gaming and market research may seem like quite different genres, they both share quite a bit in common. The heart of both a great mobile game and a great market research study is authentic engagement. When people feel their actions are a true reflection of themselves, they spend more time and energy participating in the activity. In addition, market research and gaming create community. The ability to share your opinions, behaviors, and skills with others — whether through strategy games or surveys — allows people to connect and showcase what makes them unique.

When working to understand the gaming audience, market research becomes your superpower. To become the master of your audience, you first need to respect and understand it. As a consumer-first insights platform, DISQO is built upon transparency, trust, and quality because we believe the highest quality insights come from participants who are openly engaged. We start all of our research with a representative first-party research audience, whose identities are verified and responses are validated against fraud. Then, we use gold-standard survey techniques to gather consumer opinions through surveys. Finally, we incorporate actual digital behaviors of our audience to round out

the insights. This combination of attitudinal and behavioral data packs an insights punch that enables companies to more deeply understand every audience and its evolution over time.

To help AdColony better understand gamers in this study, DISQO gathered the experiences of over 1,200 members of the DISQO Audience, pairing responses of an in-depth survey against verified demographic attributes for each participant.

We were pleased to partner with AdColony in this study of the gaming audience and hope you discover something helpful. Always remember, great market research is a skill that helps businesses level up!

Armen Petrosian
Chief Marketing Officer
DISQO

Chapter 1

Who is the American Mobile Gamer?



The Evolution of Mobile Gaming Demographics

The gaming market, specifically mobile gaming, has been snowballing over recent years. Games are the most popular mobile app category by large margins in both the Apple App Store and Google Play Store by share of available apps. According to Statista, games account for 22% of iOS active apps and 14% of available Android apps. As the gaming industry continues to grow and evolve rapidly, the same can be said about mobile gaming demographics. The growth of mobile gaming comes from increased accessibility to smartphones. Their widespread adoption has afforded people the chance to play a

variety of genres at their leisure. With the availability of games that appeal to broader audiences, people are spending more time and money on mobile gaming. In this mobile gaming study, 78% of respondents said they played mobile games to varying degrees of frequency. While the numbers of mobile gamers continue to increase, many advertisers still hold on to outdated misconceptions about who these players are. Our research shows that the modern American mobile gaming audience spans demographics across the board.

Defining Frequency

While the majority of American adults are playing mobile games, they are not playing at the same level of frequency. Before we dive into the demographic data, let's define the types of gamers in terms of frequency. We have categorized players as Committed Gamers, Regular Gamers, and Occasional Gamers. Committed Gamers are those who play at least once a day

or several times a day. While a majority of respondents said they play mobile games, almost half of them are Committed Gamers. Regular Gamers play at least once a week, and Occasional Gamers play once to several times a month. The margin between Committed Gamers and players of less frequency is quite steep. Out of American consumers, 16% are Regular Gamers, and 13% are Occasional Gamers.



Mobile Gaming Across Generations

Video games have long been considered a pastime of children, adolescents and young adults. The availability of games on smartphones has since created major shifts in the gaming audience. Older mobile gamers are not just casually playing; many of them are Committed Gamers. Unsurprisingly, more than half of respondents aged 18-34 said they play mobile games daily. What might be surprising to some advertisers is that an average of 53% of consumers between 35 and 54

years old are Committed Gamers. While the shares of Committed Gamers decrease among the older groups, the numbers are still considerable. Approximately 36% of those aged 65 to 74 and just over a quarter of those over 75 play mobile games daily. When looking at the frequency of play across age groups, the majority of respondents who play mobile games are Committed Gamers. No matter the age group, if someone is playing mobile games, they are most likely to enjoy playing daily.

By Age

	18 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	Over 75
Committed Gamers	62%	53%	51%	55%	42%	36%	26%
Regular Gamers	19%	19%	21%	13%	11%	15%	14%
Occasional Gamers	11%	16%	13%	12%	14%	13%	9%

Equal Distribution Between Males and Females

Some may associate gaming with men more than women. It's an image that many advertisers cannot seem to shake from their heads. Research has shown time and time again that the skyrocketing popularity of mobile gaming is hardly limited to one gender. The shares of female versus male mobile gamers differ

by only a fraction (78.0% versus 78.7% of respondents, respectively). When looking at play frequency, males who play mobile games barely edged out females. Despite the longstanding stereotypes, 48.8% of female respondents indicated they were Committed Gamers, not far off from the 49.1% of males who indicated the same.

By Gender

	Female	Male
Committed Gamers	49%	49%
Regular Gamers	16%	17%
Occasional Gamers	14%	12%

The shares of female versus male mobile gamers differ by **only a fraction** (78% vs 78.7%)

A Nationwide Pastime

Mobile gaming’s popularity is not just limited to a specific region in America and stretches from coast to coast. The West has the highest share of Committed Gamers at approximately 52%. With tech and video gaming hubs in California and the Pacific Northwest, it is not surprising that this region would have the most avid mobile gamers. What might be more unexpected is that other regions like Midwest, South and Northeast are not too far behind with

at least 46% of the residents playing at least once a day. The accessibility of high-speed internet and the increased affordability of smartphone data plans spans the country so people from all regions can spend increased time playing mobile games. Similar to other demographic breakdowns, the margins between Committed and Regular Gamers are sizable. In all regions, there are more Committed Gamers than Regular and Occasional Gamers combined.

By Region

	West	Midwest	South	Northeast
Committed Gamers	52%	49%	49%	47%
Regular Gamers	18%	14%	15%	18%
Occasional Gamers	12%	12%	14%	15%

Multilingual Gamers

The diversity of mobile gamers mirrors the diversity of the Americans themselves. A significant portion of U.S. residents are multilingual, and those who play mobile games are no different. Respondents in the study identified themselves as Spanish speakers and non-Spanish speakers. According to this study, a larger percentage of Spanish speakers (81%) play mobile games over non-Spanish speakers (78%). Of the Spanish-speaking

segment, 48% of them said they played games on their smartphones at least once a day. Non-Spanish speakers have an almost equal share of Committed Gamers at 49%. Spanish speakers are 46.7% more likely to be Regular Gamers who play at least once a week in comparison to non-Spanish speakers. Both developers and brands who advertise in games should take this data into consideration when making plans to localize their in-game content.

Spanish Speaking?

	Yes	No
Committed Gamers	48%	49%
Regular Gamers	22%	15%
Occasional Gamers	11%	14%

Spanish speakers are **47% more likely** to be regular gamers who play at least once a week in comparison to Non-Spanish speakers



Gaming at all Education Levels

Many assumptions are typically made based on consumers’ background, so we looked at how often mobile gamers play in comparison to their completed education level. When looking at mobile gamers overall, people with some postgrad education had the highest share of players of any frequency. Eighty-two percent of that group said they played games on their smartphones at least once a month. Respondents who haven’t finished high school have the highest overall share of Committed Gamers (61%), while on the other end of the measured education spectrum, those with doctorates had the lowest percentage of Committed Gamers at 33%.

Despite these results, this isn’t an indication that those who completed higher education levels are less likely to be more frequent players. In fact, approximately **51% of consumers that have master’s degrees play mobile games once to several times a day**. That percentage is higher than that of consumers that finished high school, some college, or a trade school program. With results all over the map, the most solid conclusion is that education level isn’t really a factor. Gamers are most likely playing mobile games and most likely playing them every day.

Big Earners, Big Players

When brand advertisers look for a deeper understanding of mobile gaming audiences, they’re probably curious about spending capabilities. The study asked respondents to share a range of household income to understand how consumers in various income brackets fit into the mobile gaming audience. Respondents who make more than \$250,000 represent the biggest share of mobile gamers with 82% of that group stating they play at least once a month. As the income brackets go up, so do the percentages of Committed

Gamers. Approximately 48% of those with a household income of less than \$50,000 are playing once to several times a day. On the other end, almost 65% of respondents with an income of over \$250,000 are Committed Gamers. Free-to-play gaming apps typically have caps on playtime. In-game ads and purchases allow players to receive more lives or currency to access more content. Mobile gamers with more disposable income have a better chance of playing several times a day without maxing out their playtime.

51% of consumers that have **master’s degrees** play mobile games once to several times a day

65% of respondents with an **income of over \$250,000** are committed gamers who play mobile games at least once a day

By Education

	No GED	High School	Some College	Trade School	Associate’s	Bachelor’s	Some Postgrad	Master’s	Doctorate
Committed Gamers	61%	48%	48%	43%	53%	48%	54%	51%	33%
Regular Gamers	17%	15%	18%	19%	15%	18%	13%	12%	15%
Occasional Gamers	2%	16%	14%	7%	11%	12%	15%	16%	22%

By Household Income

	Under 50k	50-99k	100-149k	150-199k	200-249k	Over 250k
Committed Gamers	48%	49%	49%	53%	58%	65%
Regular Gamers	17%	18%	15%	8%	8%	12%
Occasional Gamers	13%	13%	16%	14%	0%	6%

No Longer a Niche Market

After sifting through data for several demographics, the answer to the question “Who is the American mobile gamer?” is actually a simple one. The American mobile gamer is everyone.

There are mobile gamers of all ages, genders and from all regions in the U.S. The data shows that mobile gaming is not limited to English speakers and a majority Spanish speakers play regularly. No matter educational background or household income, most mobile gamers are playing at least once a week.

Mobile gaming is no longer a niche market but one that contains a variety of segments. By understanding the unique needs and interests of each demographic group, advertisers could target them and share their messaging at scale.



Chapter 2

Game Categories



Chart-topping Game Genres

Back in the day, when there were only 500 apps in the App Store, games were simply electronic versions of classic games that we've played for decades. Super Monkey Ball was a derivative of a game that was created and made popular during the arcade era of the late 70s and 80s, and card games like Texas Hold 'Em have been around for even longer.

When Angry Birds came along and set the bar for mobile gaming, followed by the immense popularity of Candy Crush, these games were simply mobile manifestations of puzzles, a genre that actually goes back 250 years, all the way to 1767, when the first jigsaw puzzle was invented!

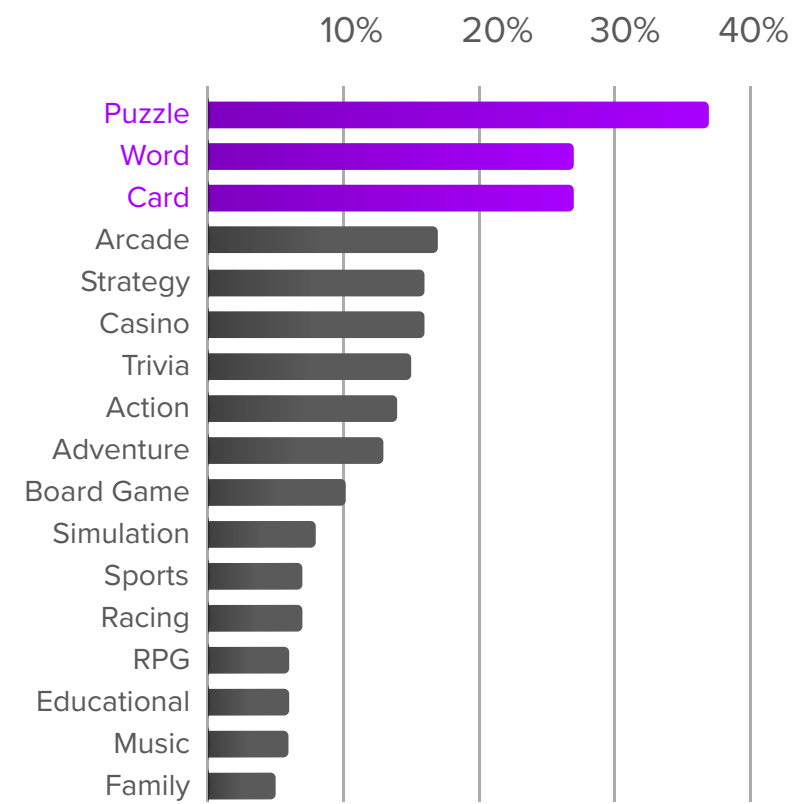
In the past ten years, of course, we've seen video game publishers use mobile as a second-screen extension and companion apps and even mobile versions for some of their most popular titles like Call of Duty, Clash of Clans and Mario Kart. We've also seen new technology like AR spur development of games like Pokémon Go.

While these multiplayer, strategy and racing games are certainly chart-toppers, they still represent a minority of the total volume of games that consumers play. At any given moment, at least half of the top free apps in the App Store and Google Play are "hypercasual" titles, and they have the highest number of installs on average per app in more than half of the top global markets.

What is a hypercasual game? It's really more of a business model than a genre or category. These games are almost always free, have a minimalistic interface, and are so easy to play that users can immediately pick them up after downloading, there is nothing to explain - no learning curve.

What the hypercasual genre has done is allow certain categories, like Puzzle, Word and Card games, to reach higher levels of user volume, due to the fact that within the category there are games that are so easy to play that they have more broad, mass appeal. For example, there are hundreds if not thousands of iterations of the traditional Match-3 game – which are basically simpler versions of classic puzzle games. All of these simple games with puzzle mechanics flooding the app stores and people's phones have vaulted the Puzzle category to the number one spot in popularity.

Mobile gaming genres by popularity

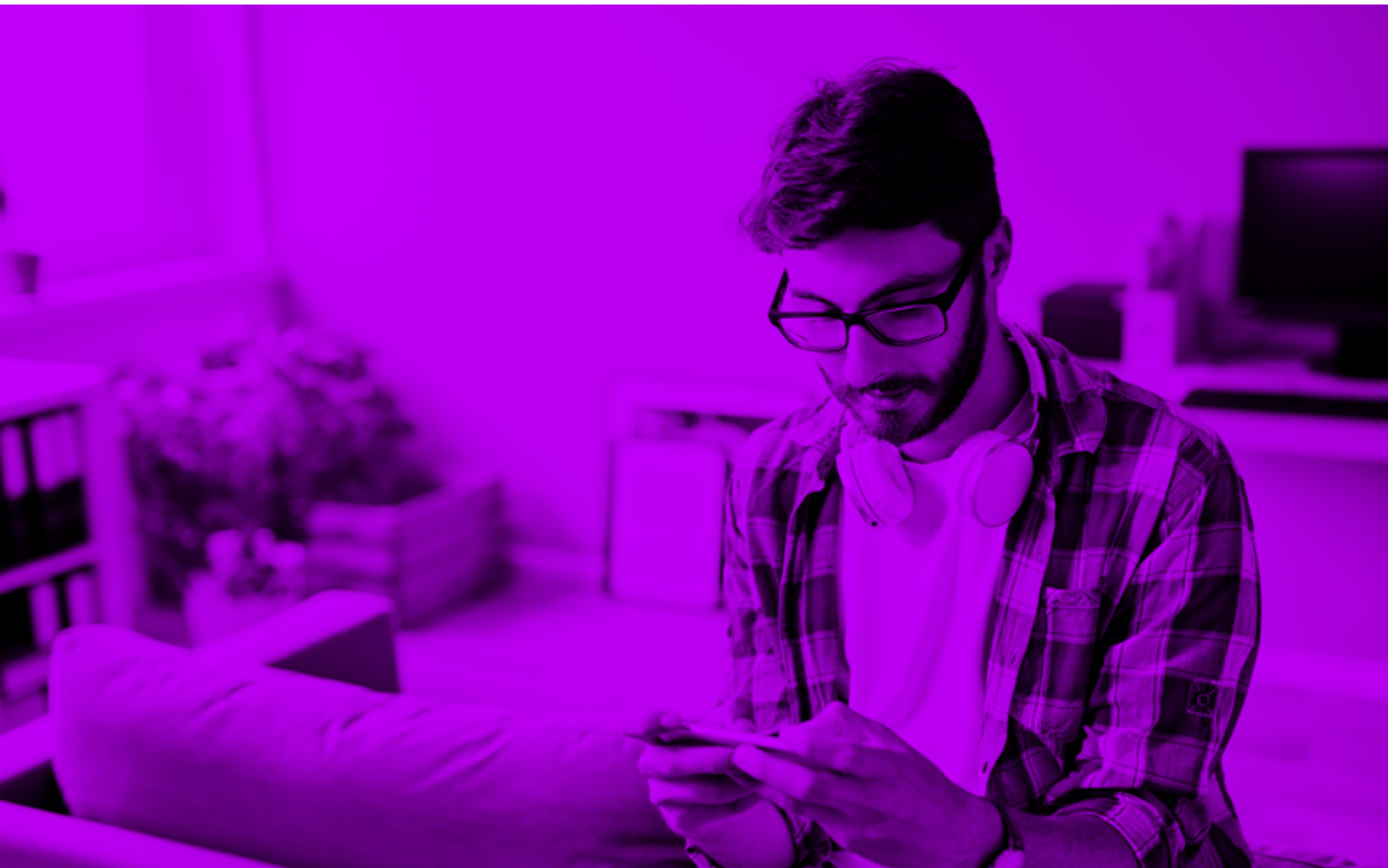


Who is playing puzzle and word games?

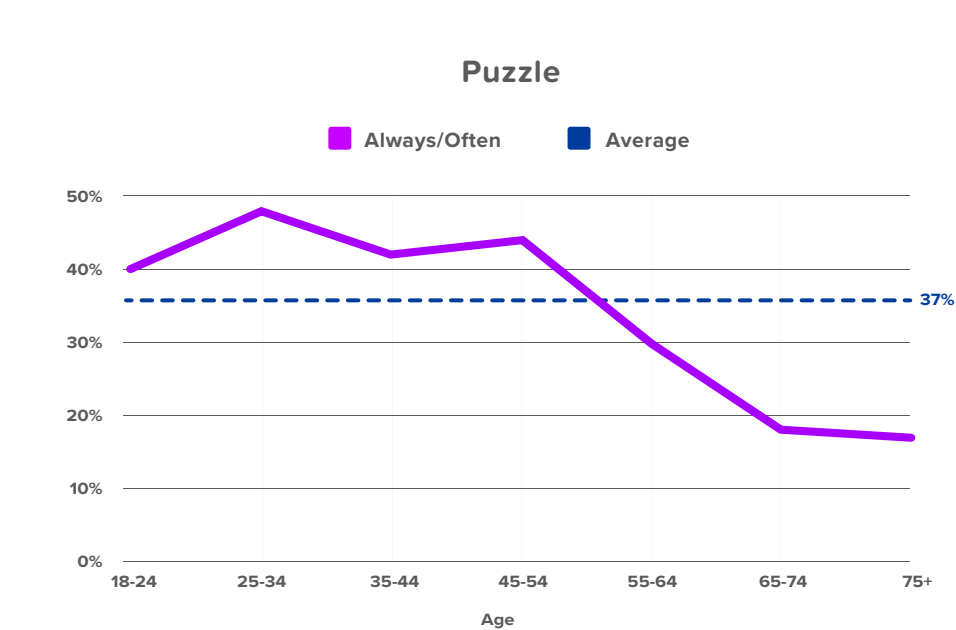
The question here really is, who *isn't* playing puzzle games? The genre does seem to have an almost universal appeal. Nevertheless, stereotypes persist, and puzzle games are often considered to be popular only among the youngest and oldest age groups. The assumption here is that middle-aged consumers are too busy with families and careers to

engage in brain-tickling entertainment. The other assumption is that middle-aged people are solving real-world puzzles, like putting together Blue Apron ingredients or packing a suitcase for a weekend getaway. So this age group would shy away from the simulated kind.

The data, however, tells us otherwise:

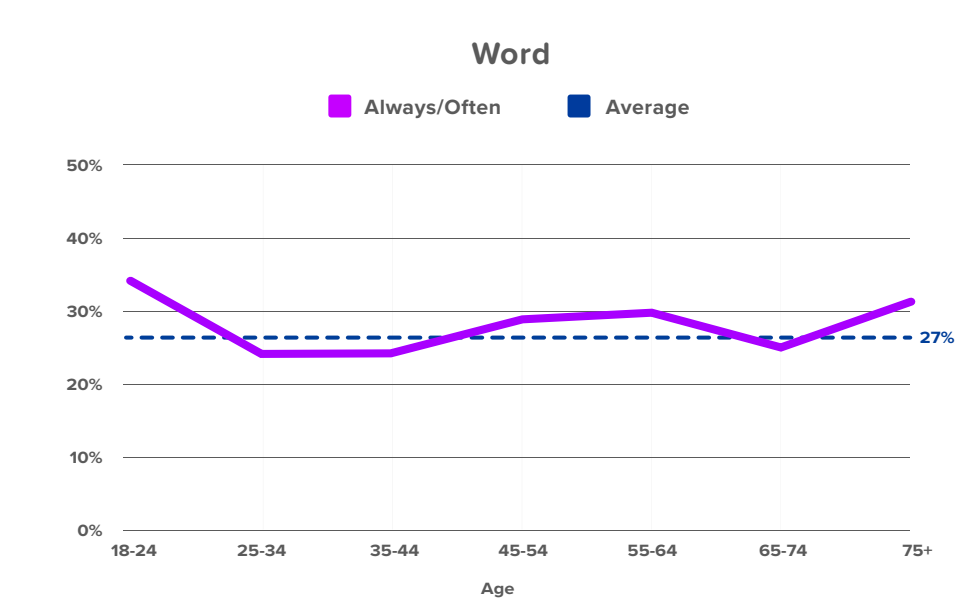


What type of mobile games do you play?

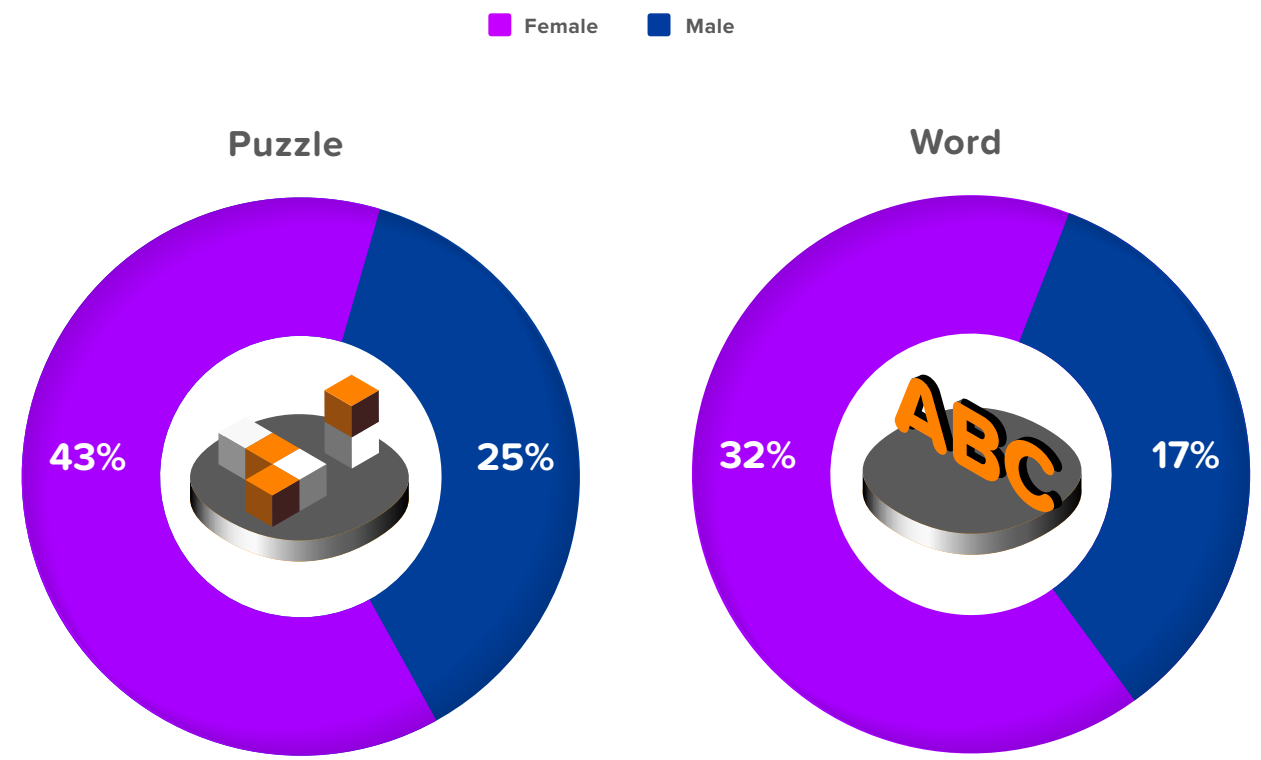


As you can see, puzzle games skew Millennial, with the majority of those who play puzzle games falling into the 25 to 34 age group. There is a large dropoff after age 65, so we can see that the retired demographic is not spending

significant time with puzzle games. They do, however, play more Word games, with those over 75, as well as 55-64, and the youngest group (18-24) being into games like Words with Friends.



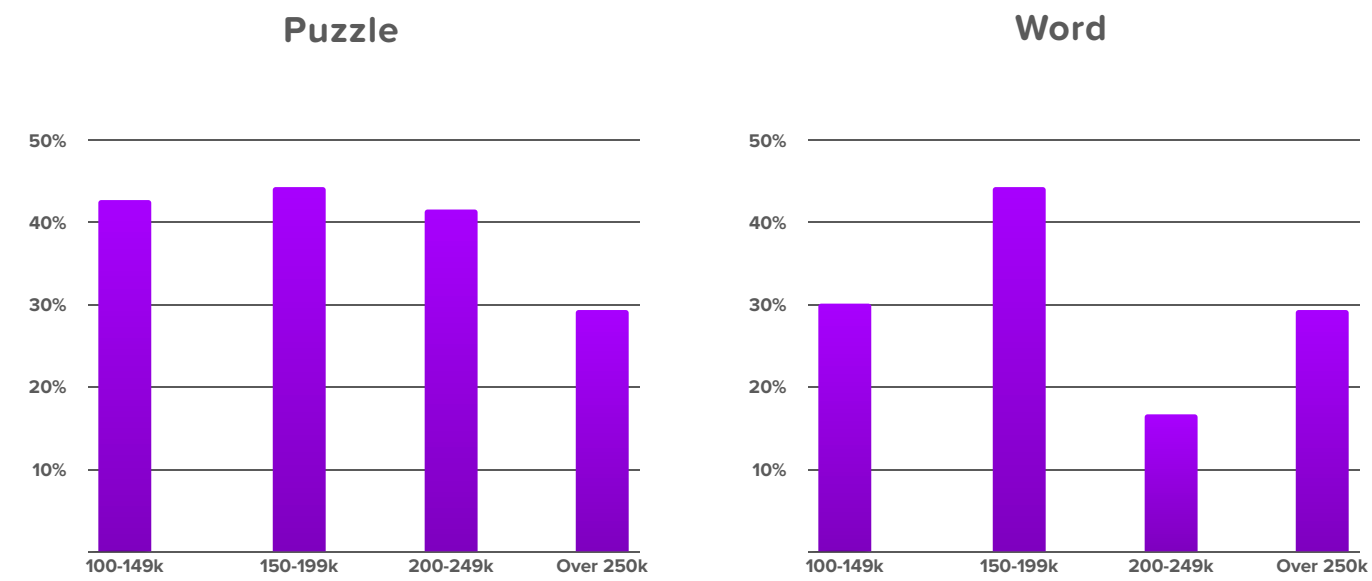
Both Puzzle and Word games also skew female over male



Affluent consumers are playing puzzle and word games

Compared to every other game genre, Puzzle and Word games have the highest percentage of consumers with a household income level of over \$250,000 annually, with

Strategy games rounding out the top 3, also with nearly 30% of respondents with that income noting they play.



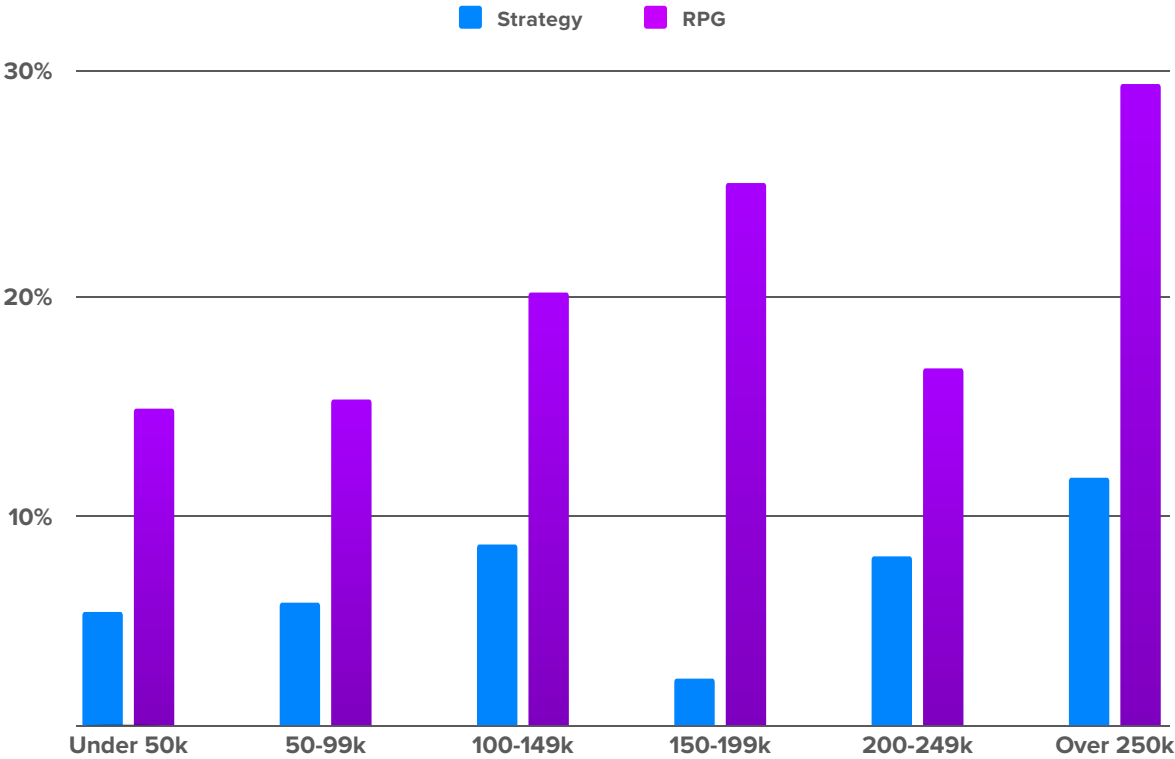
For both categories, the peak level of use is in the \$150,000 to \$199,000 bracket, which falls right in the middle of most definitions of “upper middle class” in the United States. For marketers who have defined their target group as such, it’s clear that these are the two categories on

which to focus, as they individually represent 44.4% of that population. Other top categories for this income level are Arcade (27.8%), Card (25%) and Strategy (25%), but there is a clear dip down to lower percentage levels.

Games that require thinking and planning

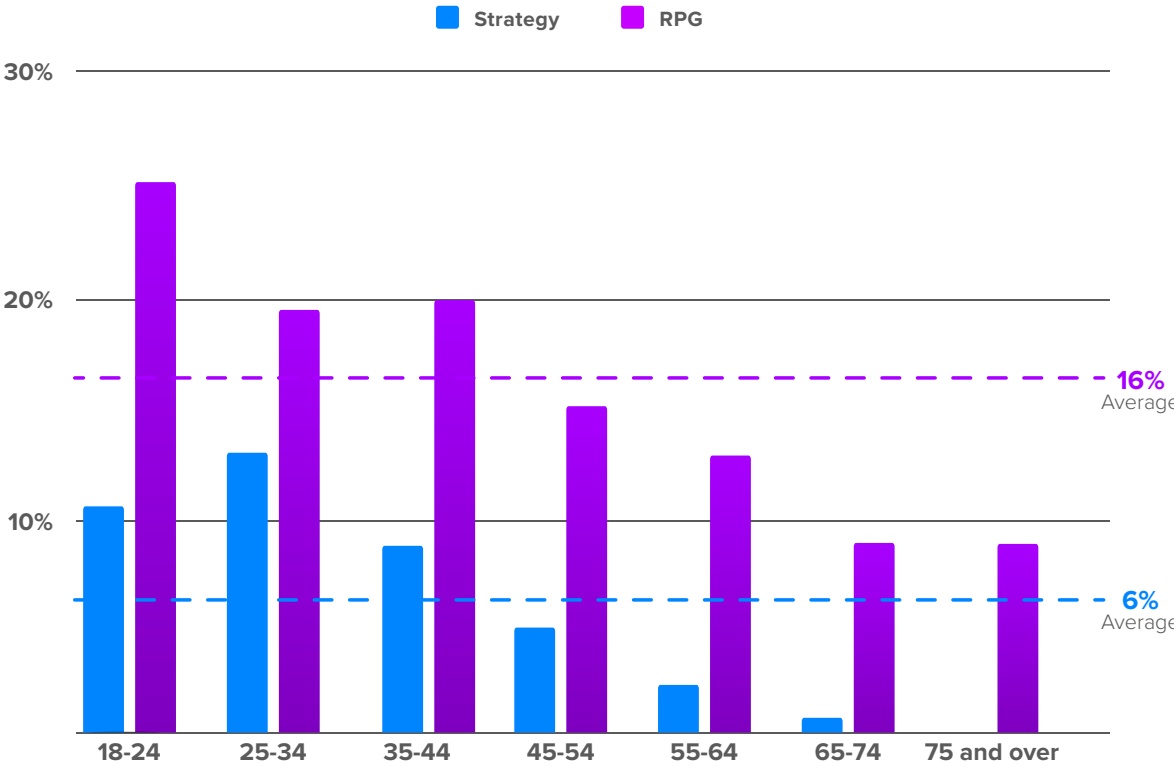
We've touched lightly upon Strategy games, as they do appear to be more popular among consumers with higher household income and the firmly situated upper middle class. Taking a closer look at the "games that make you think," we can see that there are still a significant number of mobile users who do not want the ease and simplicity of casual or hypercasual games, but rather seek out games that require planning and forethought. These are the strategy and role-playing games that challenge our minds, and take the concept of "puzzle" to a higher, tactical level. They are often fantasy-based,

like Star Traders: Frontier, which is a sandbox RPG that puts the user in command of their own starship in a dangerous star system to make decisions that can mean success or failure. Many are combat-based, like Rome: Total War, or Clash of Clans from Supercell. Going back to our theme of stereotypes, one would think that these types of games would again be dominated by younger gamers who bring their love of strategic RPG and battle games on console or PC to mobile. But again, we can bust that stereotype by looking at the data.



First, Strategy games skew slightly more towards male, 17% vs. 15.8% of females say they play titles in the genre. Second, the majority of those playing these types of games have Bachelor's or Master's degrees. And third, note the high percentage in the \$250,000+ group, but it's worth noting that most fall into the \$100,000+ HHI, and the smallest group of Strategy

game players are in the lowest bracket (<\$50,000). RPG follows a similar pattern, with nearly twice the number in the highest bracket (11.8%) vs. the lowest (5.8%). Nearly 20% of RPG players have a Master's or Doctorate degree. They also tend to be younger, with most in the 18-44 age group. This pattern is also seen in Strategy games:



The profile, then, of a mobile user playing Strategy and RPG games, is a young, highly-educated and professional person (male or female), who is also more likely to be based on the West Coast. It's easy to think of brands that might want to reach this person!

Nearly **20% of RPG players** have a Master's or Doctorate degree.

Card & Casino games: Gambling, but not really

We've come a long way from basic Texas Hold 'Em apps, that's for sure. Today's mobile card games run the gamut from deck-building games like Ascension, Star Realms and Nightfall to spinoffs of offline card games, like Cards Against Humanity (Say What? Cards Against the Universe) and Solitaire (Card Crawl). There's even a game called Cribbage with Grandpas that is, well, exactly what it sounds like. App developers have truly expanded within this space, using creative, imaginative scenarios to make card games feel like the user is a master of a fantasy world, where the stakes are higher than a simple win-lose.

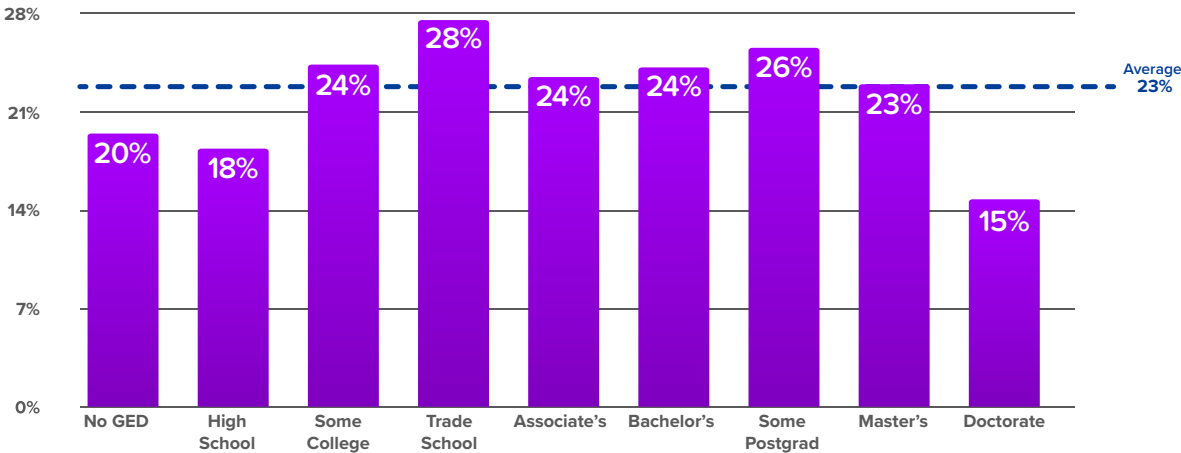
Casino games, too, all tend to have some sort of twist to them. There are various themes for all of the slot games, and variants of poker, blackjack, roulette and even craps. You can play Cleopatra Keno and Wizard of Oz slots; there is truly something for everyone.

But who is playing these types of games? Taking a closer look, we can see that the demographics of Card and Casino games have one big thing in common: trade school graduates.

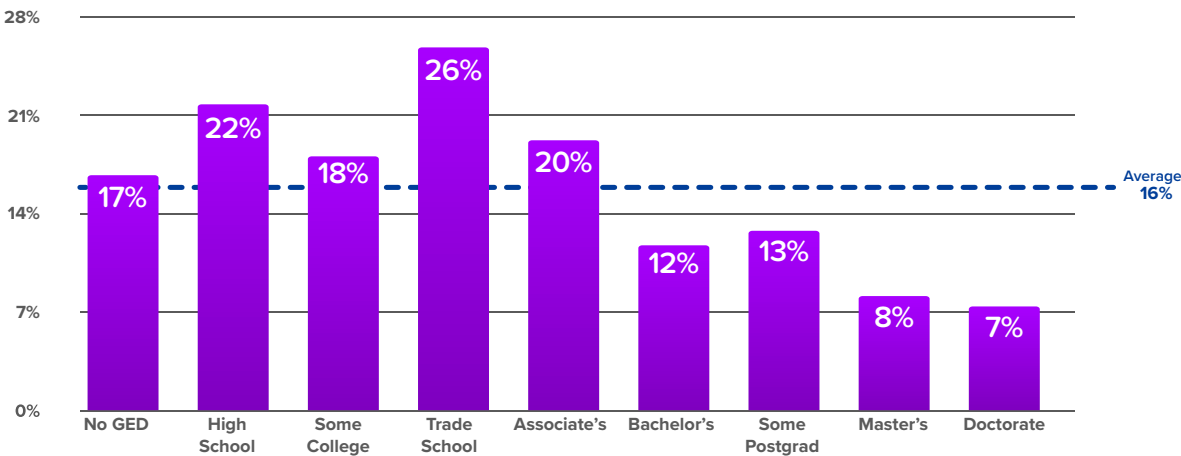
While on average, 22.8% of respondents said they play Card games and 15.9% said they play Casino games, we can see that these types of games are significantly more commonly played by those who have attended trade school – far more than any other type of education level.

When we look at age groups, the most number of players tend to fall in the 35-54 year group, with Card games also staying strong in older categories, among those 55-74 years old.

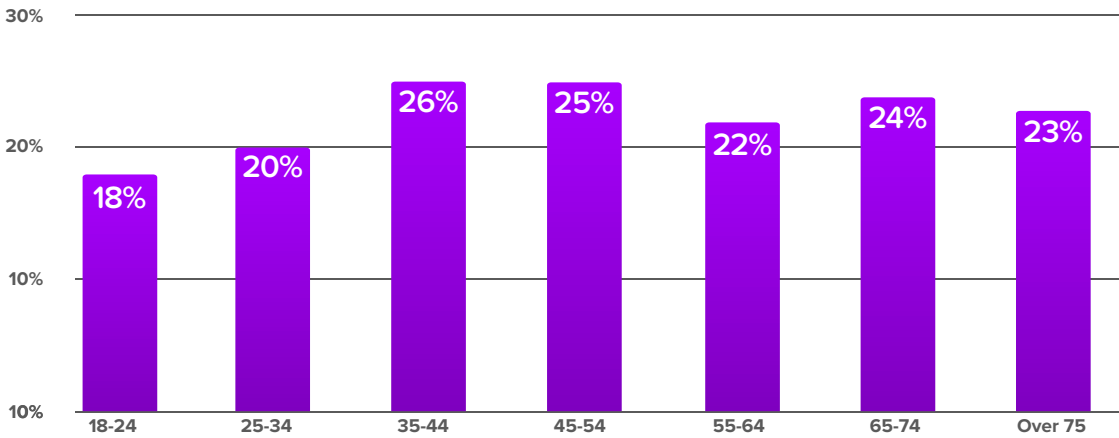
Card Games



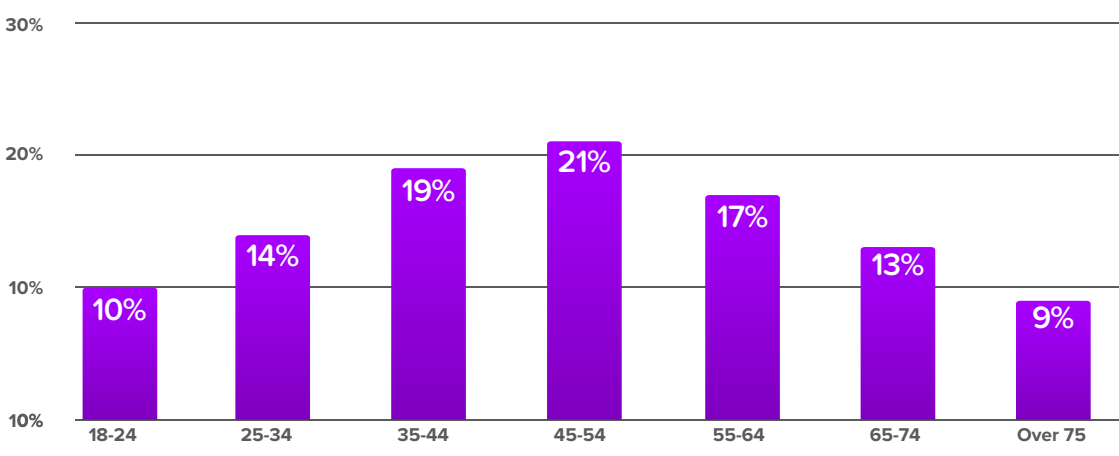
Casino Games



Card Games



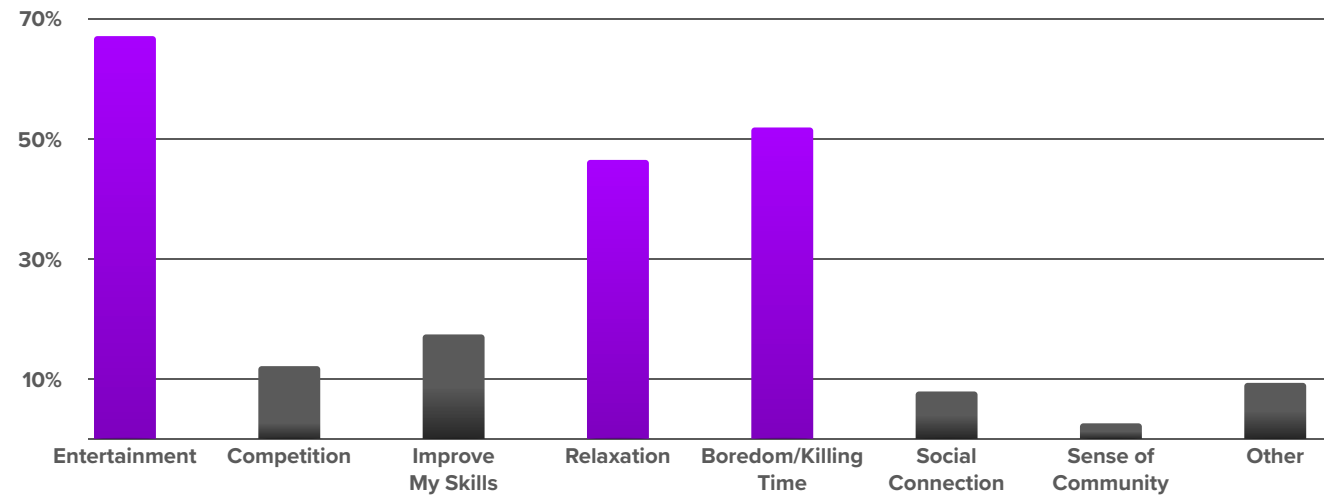
Casino Games



How do different types of games make people feel?

What is the point of playing mobile games? For most people, it's about entertainment. Nearly 7 in 10 respondents said that is their primary motivation for

playing games. For many others, it's to relax (46.5%) or to fight boredom (51.9%), perhaps killing time in between projects/tasks or while waiting on line.



Feeling can vary by income level!
Nearly half (47%) of those in the \$250k+ HII reported feeling “extremely positive” while playing Puzzle games, far higher than the average of 29.5%.

For many, the primary goal is entertainment, they are ultimately seeking an overall positive emotional experience. We asked participants how

they feel while playing each type of game, and found that there were some categories where “extremely positive” was higher than 20%.



Apps are for Everyone

It's clear that the casual and hypercasual models of app business have pushed a serious surge in the app store, and the sub-genres within them have pushed other categories to both become more accessible as developers have realized the average mobile gamer isn't as genre-savvy as they thought when the App Store launched (see Chapter 1!).

But some developers have chosen to cater to the hardcore players of all demographics, crafting in-depth role-playing and simulation titles that need time, dedication, and strategy to succeed in.

If mobile gamers could really be painted with such a simple, broad brush, as many advertisers still do today, then we wouldn't see the breadth of available titles in the App and Play Stores, and we wouldn't see the surprising trends and demographic facts above.





Chapter 3

Do You Identify as a Gamer?

What’s in a Name?

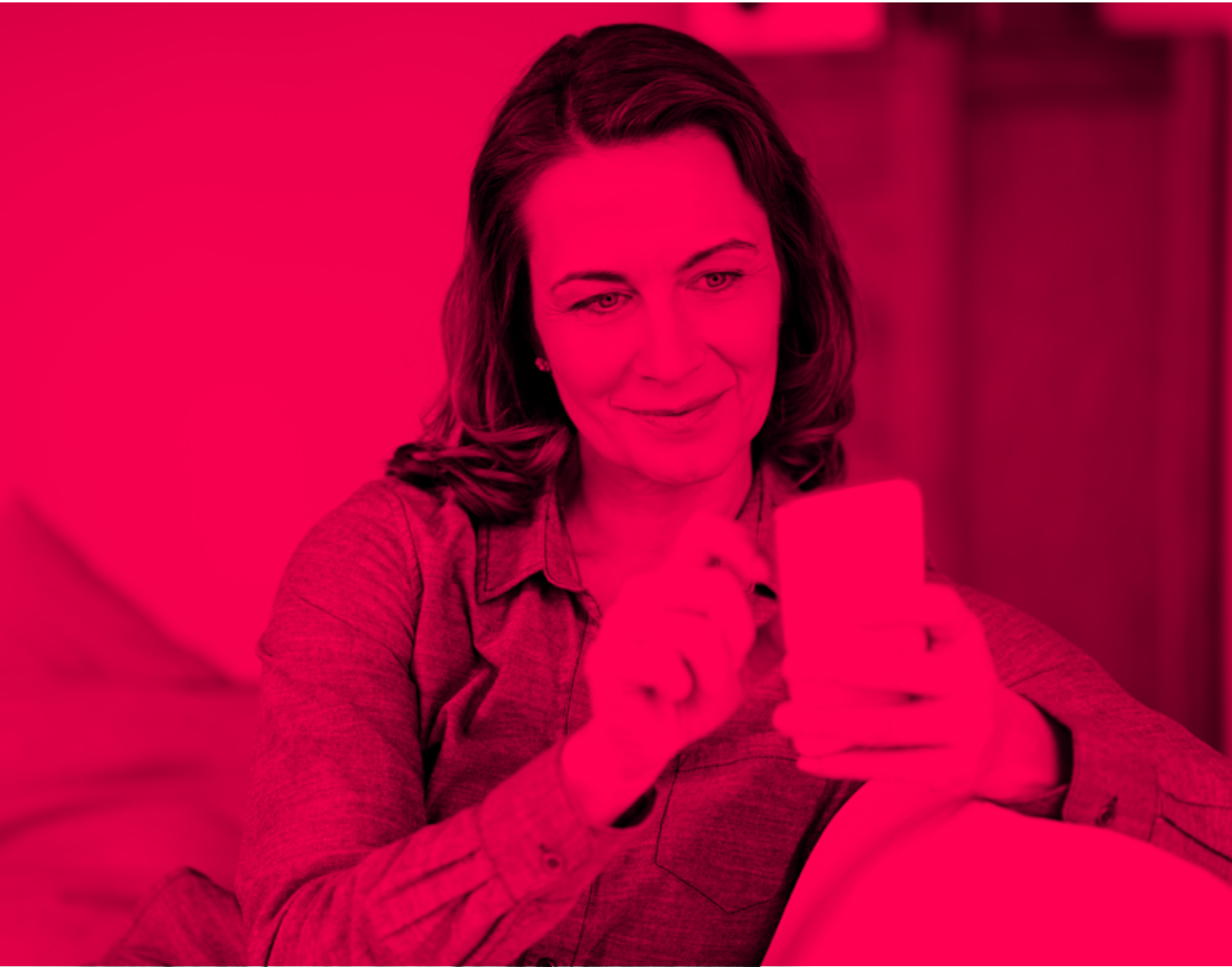
For many years AdColony has highlighted the disparity between people’s willingness to self-identify as a gamer and their propensity to play games – both on their mobile devices and in general. This study is an opportunity to quantify that difference, and while the top-level results are startlingly clear – with 78.2% of respondents playing occasionally or more frequently, versus 78.9% not self-identifying as gamers – the details are where things really get interesting.

Just because someone doesn’t self-identify as a “gamer” doesn’t mean they’re not playing games. In fact, they’re likely to be doing so, especially if they’re under the age of 45.

Nearly 9 out of 10 (89%) of those surveyed who were under 45 years old said they play mobile games on their phones.

Put simply, the raw data doesn’t tell the whole story. To truly understand the value of the mobile gaming audience, we have to look at the audience from multiple angles and perspectives.

The stereotype of the gamer as a late-teens to early-20s slacker who mooches off their hard-working parents, doesn’t have a job, and isn’t trying to get one, isn’t just incorrect. It’s a persona that even self-identified gamers reject. Why? Because the anecdotal evidence of both themselves and their peers proves this stereotype wrong.

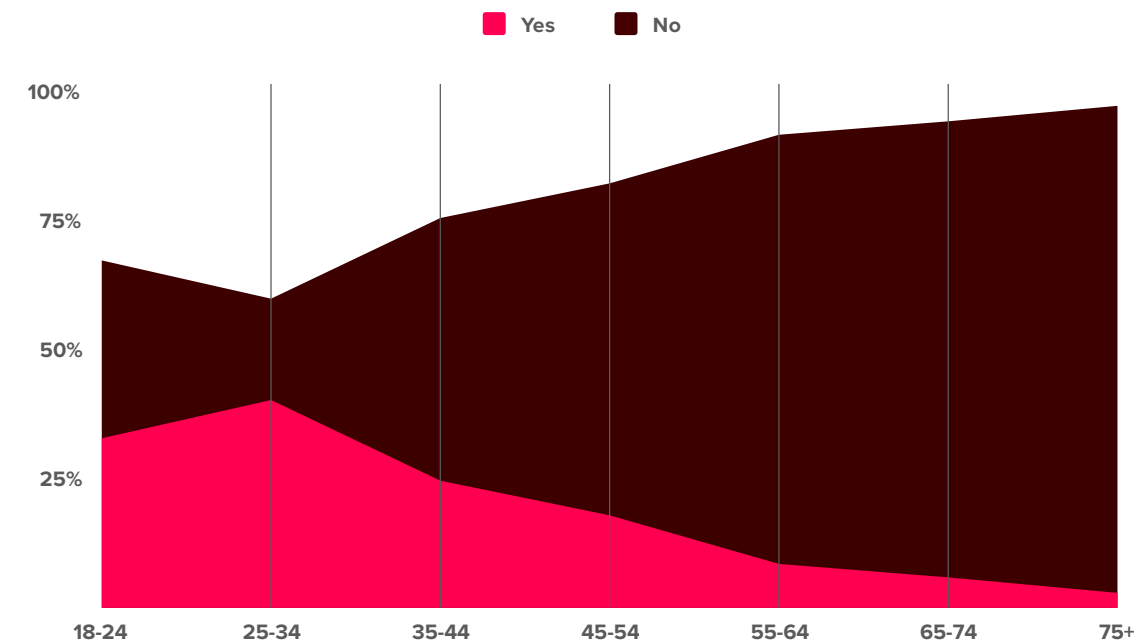


Females are **half as likely to self-identify (15.3%) as a gamer** than males (33.4%)

How old are self-identified gamers?

	18 to 24	25 to 34	35 to 44	45 to 54	55 to 64	65 to 74	Over 75
Yes	33%	40%	25%	18%	9%	6%	3%
No	67%	60%	75%	82%	91%	94%	97%

Ages of Self-Identified Gamers



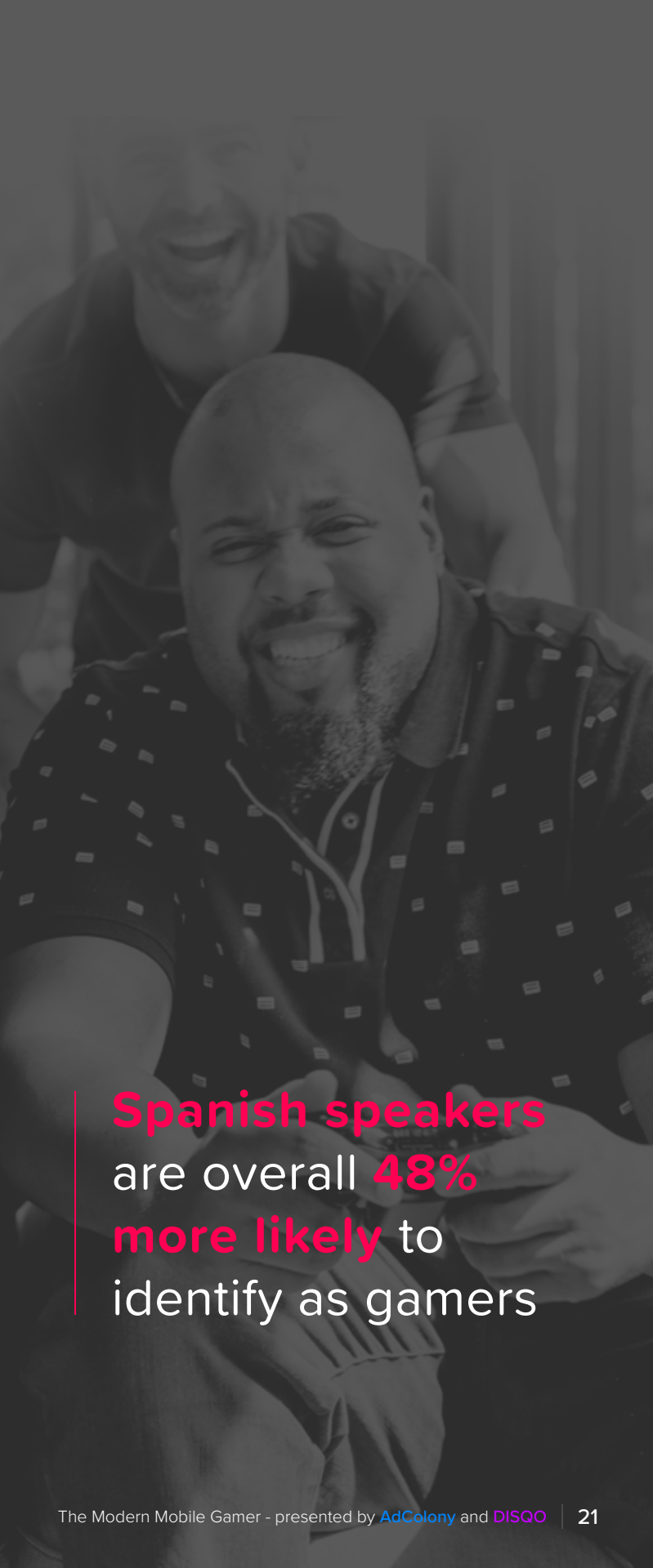
Those born between 1986 and 1995 (mid and younger millennials) are far more likely to self-identify as gamers, 22.5% more likely than their Gen Z counterparts, and 63.4% more likely than older millennials and Gen X.

Gen X and millennials were the first generations to grow up with game consoles and PCs in their homes, and it was a frequent pastime. They view gaming as a normal hobby, evidenced by their propensity to identify as gamers.

Gen Z is almost 5% more likely to play mobile games than their closest millennial age group, but almost 1/5th less likely to identify as gamers. This could be because they consider gaming so normal that it's simply not worth a label. Many barely remember a time before smartphones, and consoles were ubiquitous for them.

Looking at the older demographics, on average, 17.3% of respondents over 55 years of age play once a day or more, but only 5.8% identify as gamers. When we look at senior citizens over 75 years old, 25.7% are playing daily or multiple times per day! But only 2.9% would call themselves a gamer. This age group plays word games and card games almost exclusively. Gotta keep those neurons firing!

Females slightly outpace males for playing more than once a day: 33.8% vs 33.7%



Spanish speakers are overall 48% more likely to identify as gamers

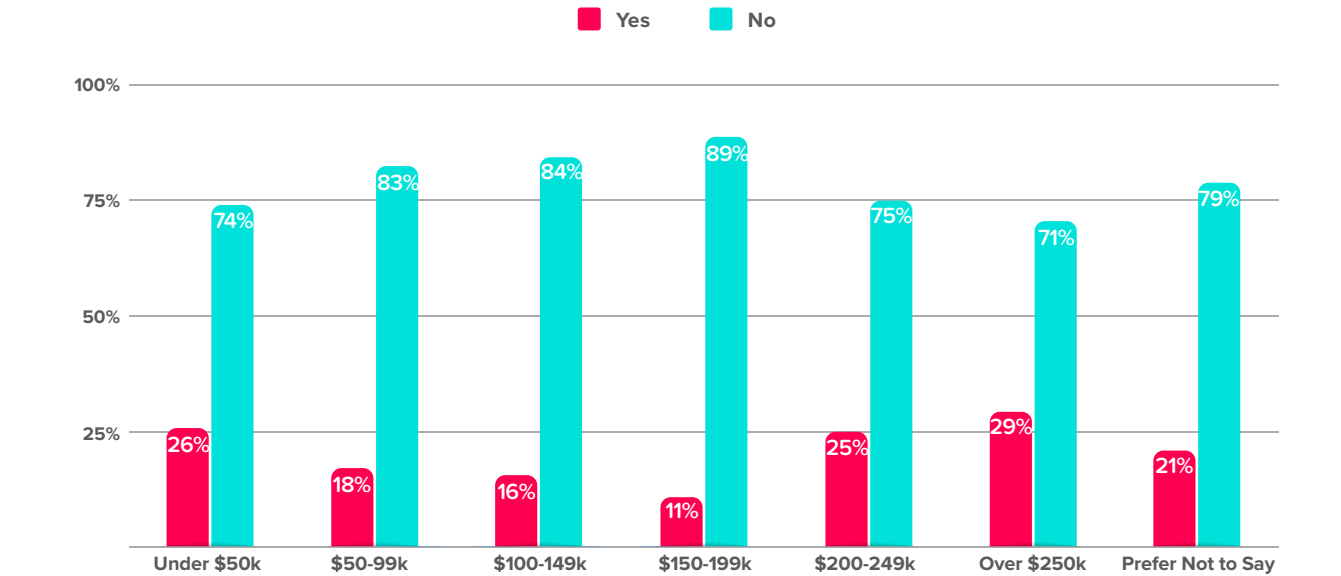
How Much do “Gamers” Make?

Game publishers, advertisers, and everyone in between have long admitted – or even been championing – the idea that household decision-makers are playing mobile games frequently enough for the channel to be valuable to advertisers. But what do the numbers really say?

The largest group of those who self-identify as gamers are actually in the \$250,000+ per year household income bracket, with 29.4% of this group saying yes, they are gamers. The next highest being the lowest income bracket — sub \$50,000 per year.

Self-identified Gamers by Age

	Under 50k	50-99k	100-149k	150-199k	200-249k	Over 250k	Prefer Not to Say
Yes	26%	18%	16%	11%	25%	29%	21%
No	74%	83%	84%	89%	75%	71%	79%



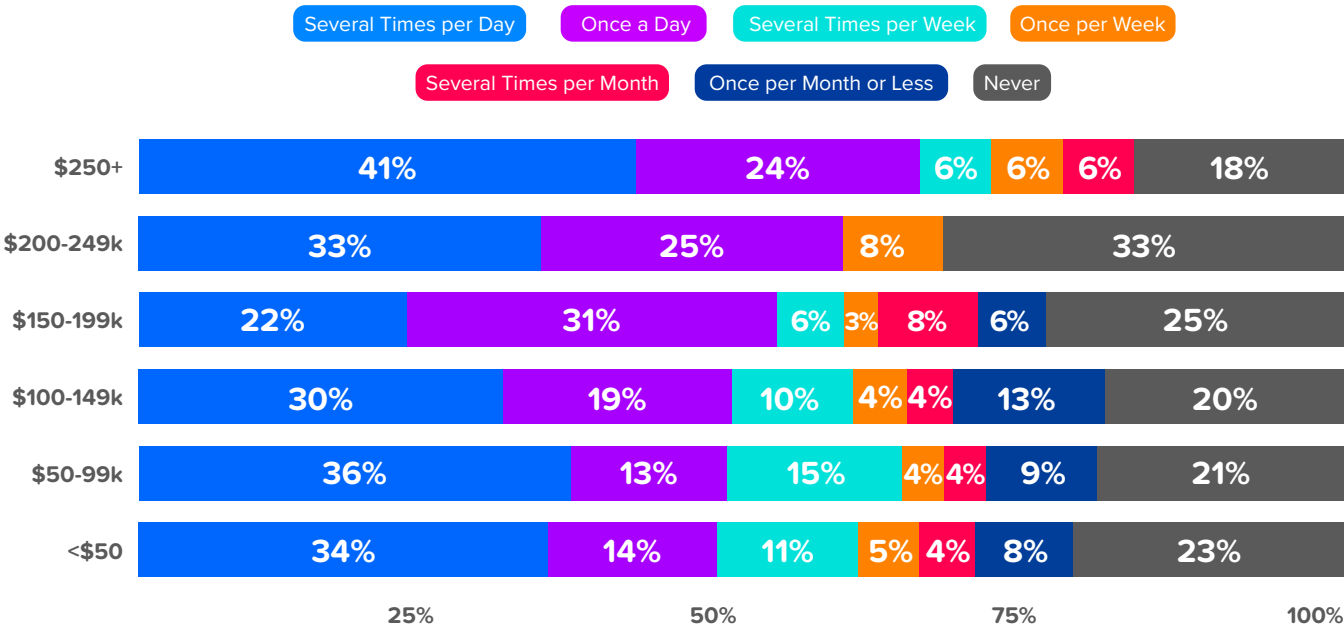
What does this tell us? Most clearly, it demonstrates that gaming is not an activity that is exclusive to one particular socioeconomic group. It finds purchase in every income bracket.

The results confirm this when we look at frequent mobile gamers by income level, and put aside whether they self-identify or not.

How Often Earners Play

The highest earners are playing more frequently than those further down the income brackets, with the lowest incidence of “several times per day” coming in the middle of the household-income pack. It’s worth noting, though, that more than half of those earning \$150,000 to \$199,000 per year are still playing mobile games once a day or more. The general trend is clear: As household income increases,

so too does the frequency of playing mobile games, and the percentage of frequent players among those earning from \$150,000 to \$250,000+ per year also increases after small drop-offs from the lowest income bracket. More than anything, these numbers crack the stereotype of the gamer — specifically, the mobile gamer.



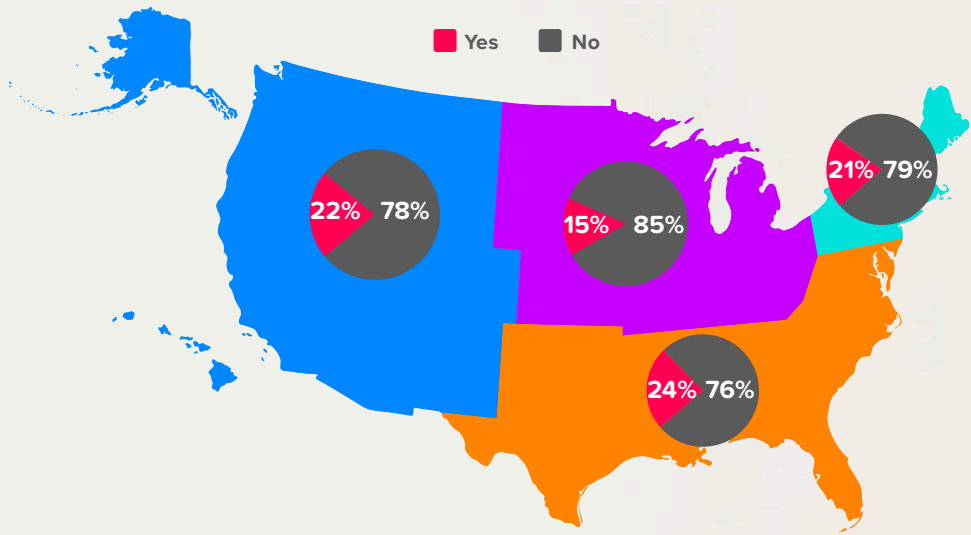
At the **\$200k to \$249k income bracket**, the amount of respondents not playing mobile games ever is awash with those playing several times per day, while the rest are either playing daily or once per week or more

US Regions

Is there any regionality to this self-identity? When it comes to mobile gamers, the answer is a pretty clear “Yes!” This trend tells us something about the use-cases and behaviors across these regions.



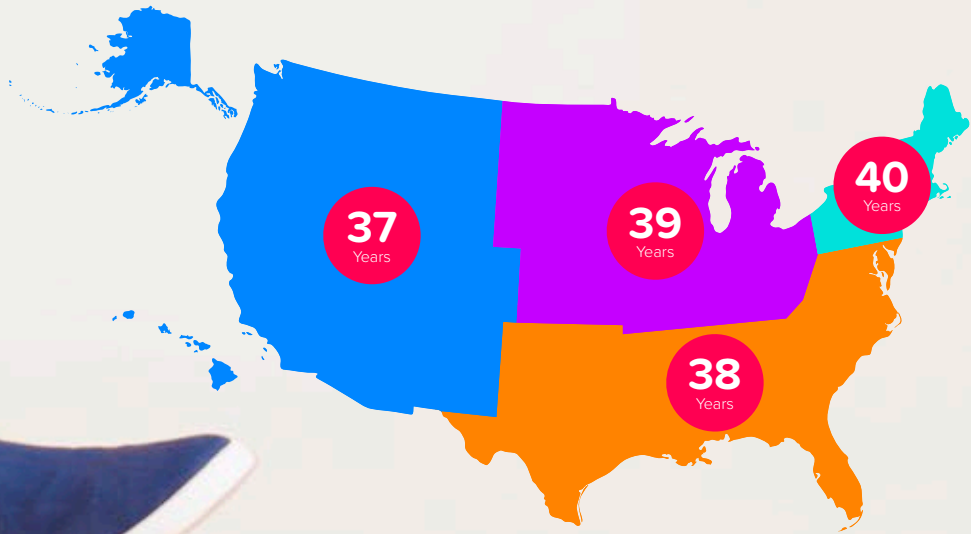
Do You Identify Yourself as a Gamer?



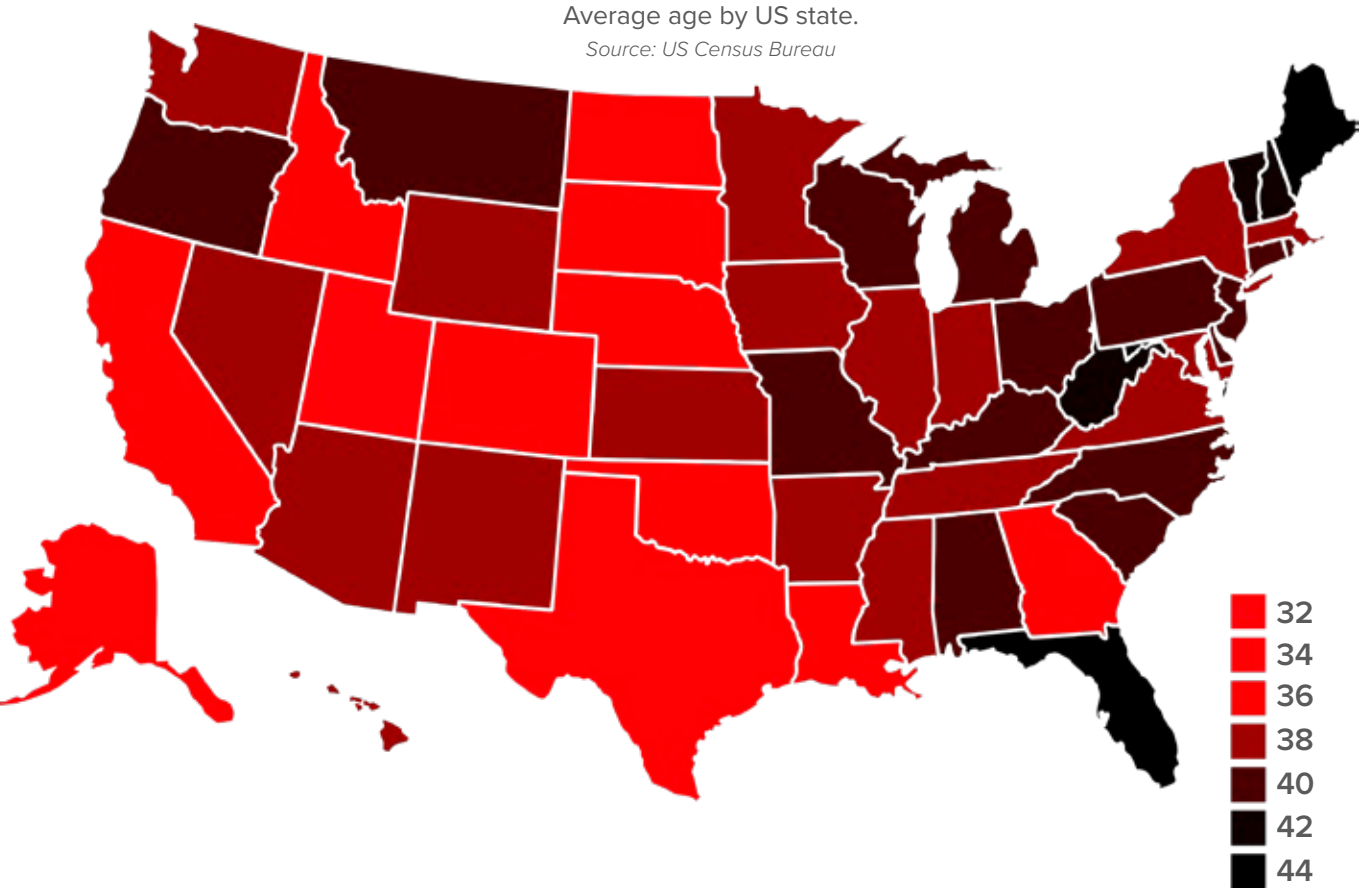
These results were a little surprising, so we dug deeper. We all have certain ideas about how the frigid midwest winters lock people inside their homes and therefore game-playing should be pretty common. But in reality, few Midwesterners identify as gamers. Likewise, in the Northeast, a region of the country where public transport tends to be well-established, respondents were more likely than those in the Midwest to identify themselves as gamers, perhaps because of all that time on the subway/train/bus idly matching-3 and finding words. Still, it was not as common as we saw in the South or West. On the other side of the country, we see the second-

highest incidence of self-identified gamers. We were surprised by the South coming out higher than all the other regions. Like the midwest, the South is generally less inclined toward public transport and is much more cars-and-highways when it comes to commutes. We sincerely hope no one is playing mobile games while driving! Given these insights, it seemed like a good time to dive into the regionality of gamers in the US.

If we look at the most recent US Census data, the average ages of the US as a whole is 38.2 in 2018, with the four regions of the US broken out below:



“I’m a gamer, y’all.”



In the South, Georgia and Texas both skew younger, with large urban centers like Dallas, Austin and Atlanta. These cities are also growing with young, educated engineers and creative types, with Atlanta’s relatively new status as the “Hollywood of the South” (or “Y’all-y-wood”) bringing those 18-24, 25-34, and 35-44 age groups, all of which are more likely to identify as gamers.

We can extend this supposition to the West, with “tech” cities like San Francisco, Los Angeles and Seattle. These cities are major hubs for the creative and entertainment industries. The West is also the home of the US video game industry, where it brings in \$32 billion a year to California’s economy alone. It’s no surprise that individuals in this region love their games.

20% of those holding Master’s Degrees identify as gamers

14.8% of those with PhDs or Doctorates identify as gamers

Almost 70% of West Coast residents play once a week or more, with more than half playing daily

How often do you play games on your mobile device?

	West	Midwest	South	Northeast
Several Times a Day	31%	36%	35%	33%
Once a Day	21%	13%	14%	14%
Several Times a Week	11%	10%	12%	13%
Once a Week	7%	4%	3%	4%
Several Times a Month	3%	2%	5%	6%
Once a Month or Less	9%	10%	9%	8%

Almost half of Midwesterners play mobile games once a day or more

An average of 47% of post high-school degree holders play mobile games once a day or more

How many games do you have installed on your phone?

	West	Midwest	South	Northeast
1 to 5 games	59%	47%	57%	54%
6 to 10 games	17%	18%	12%	15%
11 to 15 games	4%	5%	6%	5%
16 to 20 games	0%	2%	3%	1%
Over 20 games	2%	2%	1%	2%

Southerners tend to have more games installed than other regions and play for longer - 48% play for 30 minutes or more with 14% playing for an hour or more!

Popular Apps & the Regions that Love Them

We’ve seen how various regions identify as gamers and their habits for downloading, but which types of apps are users playing around the country?

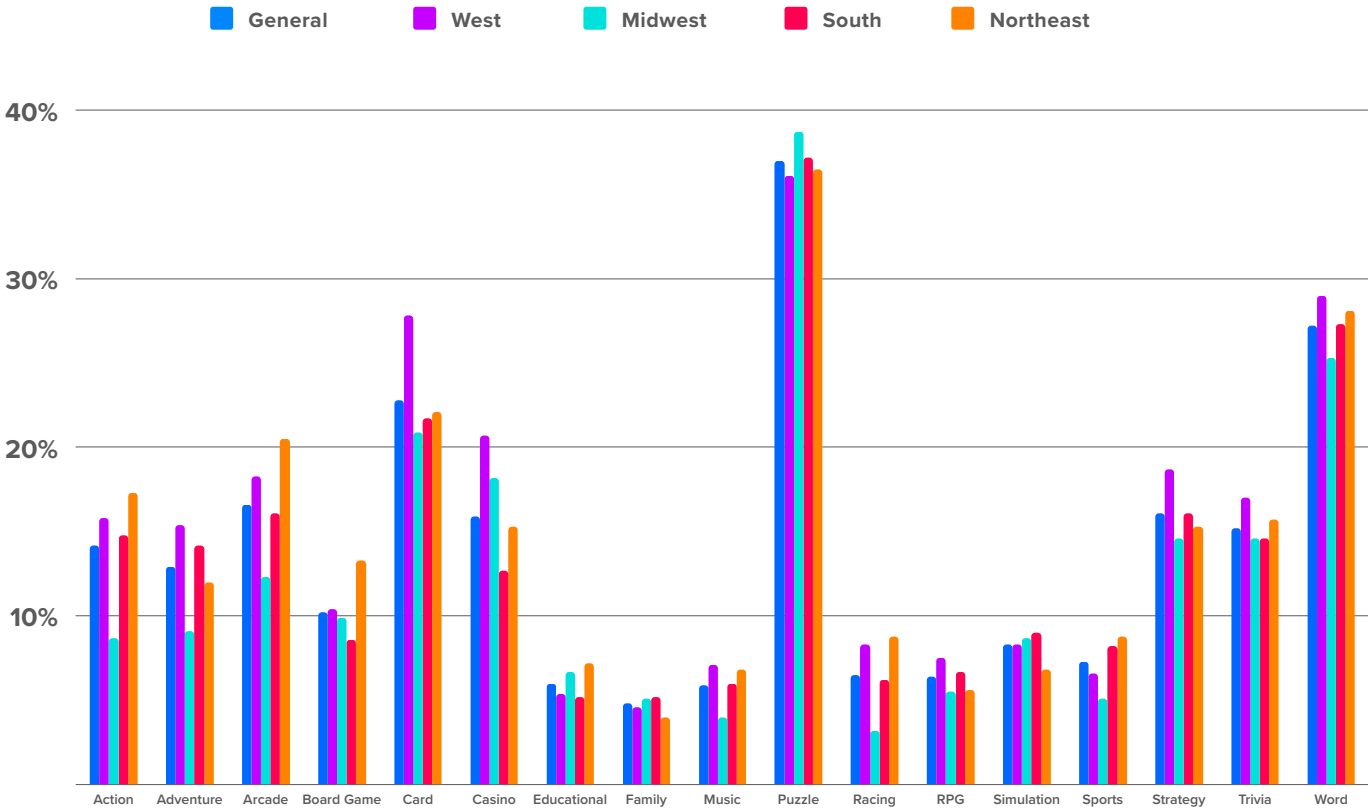
What type(s) of mobile games do *you* play?

	General	West	Midwest	South	Northeast
Action	14%	16%	9%	15%	17%
Adventure	13%	15%	9%	14%	12%
Arcade	17%	18%	12%	16%	21%
Board Game	10%	10%	10%	9%	13%
Card	23%	28%	21%	22%	22%
Casino	16%	21%	18%	13%	15%
Educational	6%	5%	7%	5%	7%
Family	5%	5%	5%	5%	4%
Music	6%	7%	4%	6%	7%
Puzzle	37%	36%	39%	37%	37%
Racing	7%	8%	3%	6%	9%
RPG	6%	8%	6%	7%	6%
Simulation	8%	8%	9%	9%	7%
Sports	7%	7%	5%	8%	9%
Strategy	16%	19%	15%	16%	15%
Trivia	15%	17%	15%	15%	16%
Word Game	27%	29%	25%	27%	28%

Categories Across Regions

The categories are incredibly popular, with apps like Wordscapes from PeopleFun, Best Fiends from Seriously, and dozens of hypercasual puzzle games taking up the Apple and Google Top 500 apps on any given day. It’s important to remember that very, very few mobile gamers play just one genre of game.

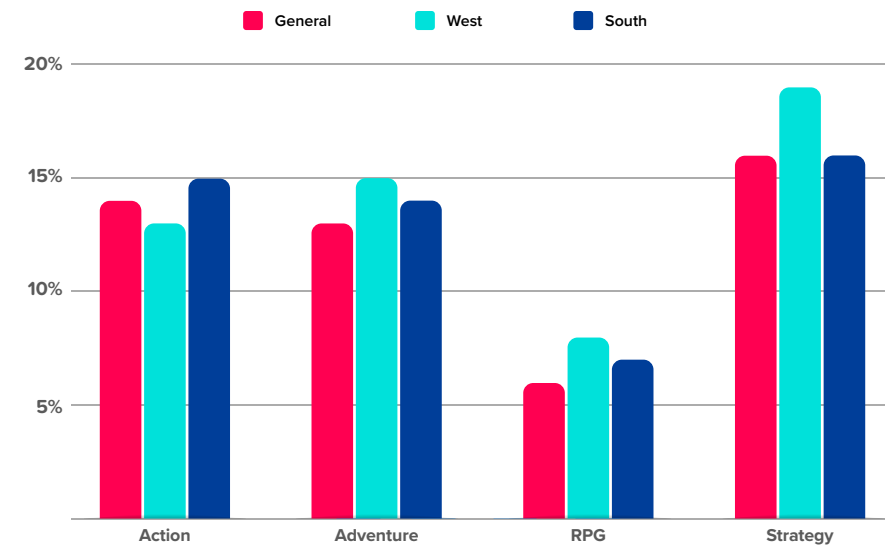
There’s an interesting correlation between those regions likely to identify as gamers and their favorite titles. Western and Southern gamers all meet or beat the national average for enjoying more traditional gaming categories like Action, Adventure, RPGs and Strategy.



One thing stands out – **People love puzzle and word games**, regardless of where they live. An average of 37% and 27% of respondents play those categories, which is unsurprising.

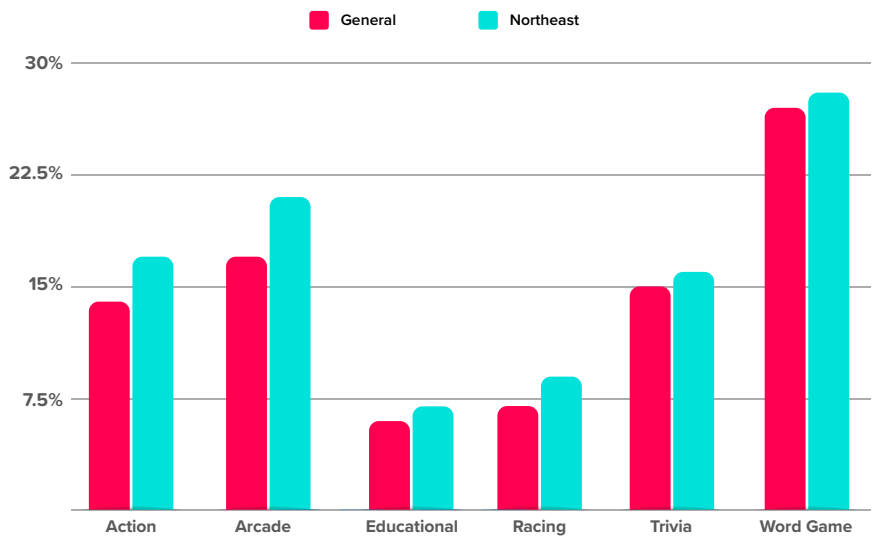
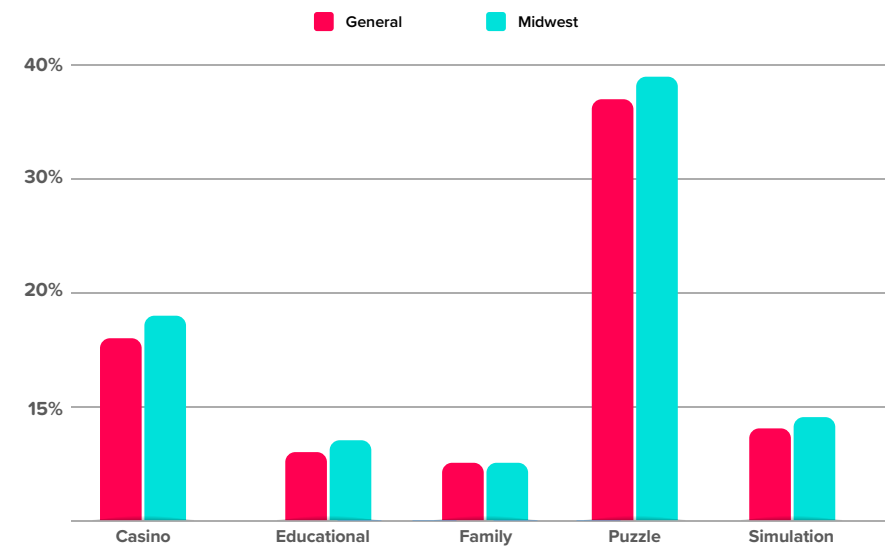


Genres Across Regions



Western players also love stretching their minds with high comparative scores of Word and Trivia, while Southerners score the highest for Simulation and are up there on Sports.

The Midwest under-indexes on many of the traditional gaming genres, but Midwesterners can't hide their love of Casino, Educational, Family, Puzzle and Simulation games.

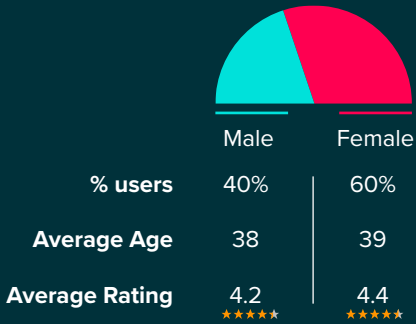


As the home of New York City, one of the most diverse cities in the world, as well as a number of other major metros, it's no wonder that the Northeast defies easy categorization. Northeasterners love Action games more than any other group, and they absolutely adore Racing games but they're also

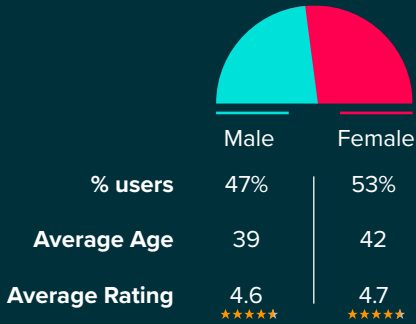
the most into casual Arcade titles. Education, Trivia and Word games also are favorites for those in the Northeast. Regardless of what type of app, product or brand you want consumers to engage with, the Northeast will have plenty of users ready to dive in.



Best Fiends
Seriously, Inc.
4.6 Million Active Users



Wordscapes
PeopleFun, Inc.
13.4 Million Active Users



Source: Apptopia Data Q3 2020, 365 Days rolling

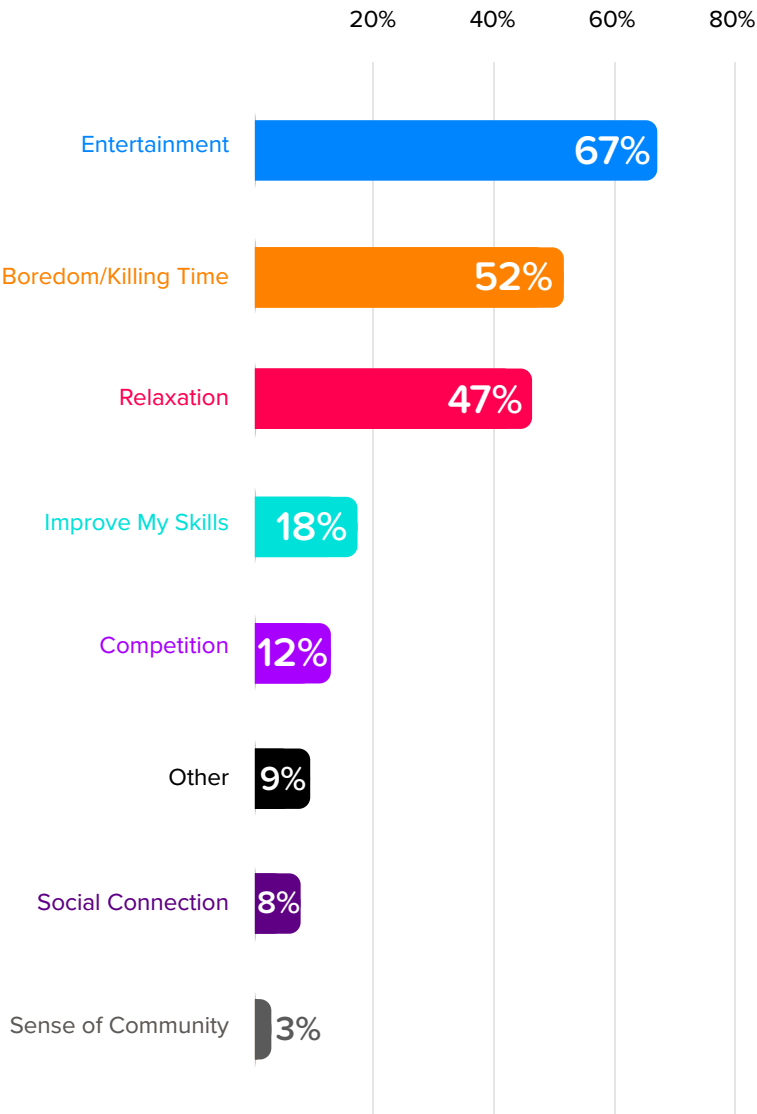
Chapter 4

The Gaming Experience



At this point, we've established that mobile gaming is ubiquitous. Whether they self-identify with the label or not, gamers span generations, genders, income brackets, education levels, geographies, and almost every other socio-economic-demographic split imaginable. However, are all mobile gamers motivations the same across the board? Obviously not. With the multitude of different types of players and users, their reasons for playing will differ greatly. The gaming experience differs between users who fall into distinct demographic buckets. Below, we will explore the key similarities and differences.

Motivation to Play



Respondents were given the opportunity to select multiple responses, since different reasons to play might strike depending on someone's day or mood, resulting in 67% entertainment, 52% boredom/killing time, and 47% relaxation. Next in line was improving skills which came in at only 18%.

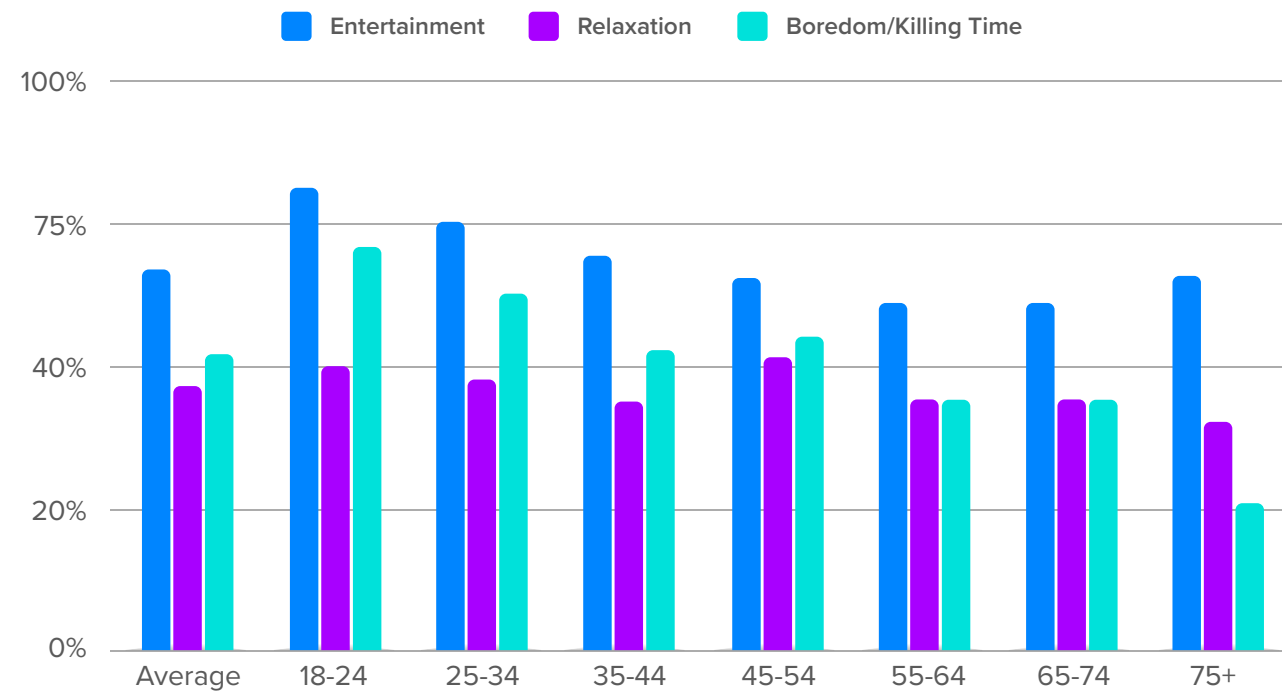
Age Breakdown

When broken down by age, it is clear that ages 18-24 and 25-34 are driving forces for both entertainment and passing the time. These age brackets are overwhelmingly utilizing mobile gaming as a way to stay engaged in an enjoyable way.

While it may not be to the same degree, this is echoed across the board, whether consumers are high income, low income, educated, uneducated, lawyers, school

teachers, school kids, construction works, or any other combination of age, income and career. The consensus amongst all ages, income brackets, education levels and geographies is that the number one motivation to play is entertainment. Regardless of where they fall in each sub-category, entertainment represents the highest percentage of respondents. People are playing games to have a good time.

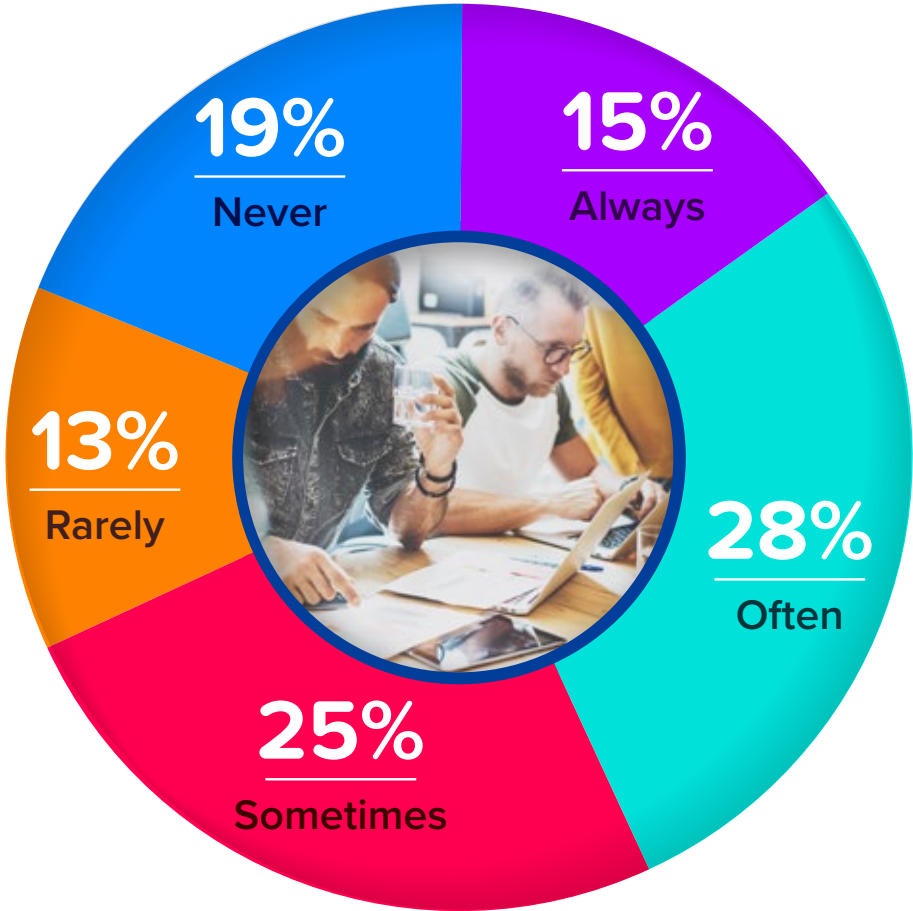
Entertainment, Relaxation, and Boredom



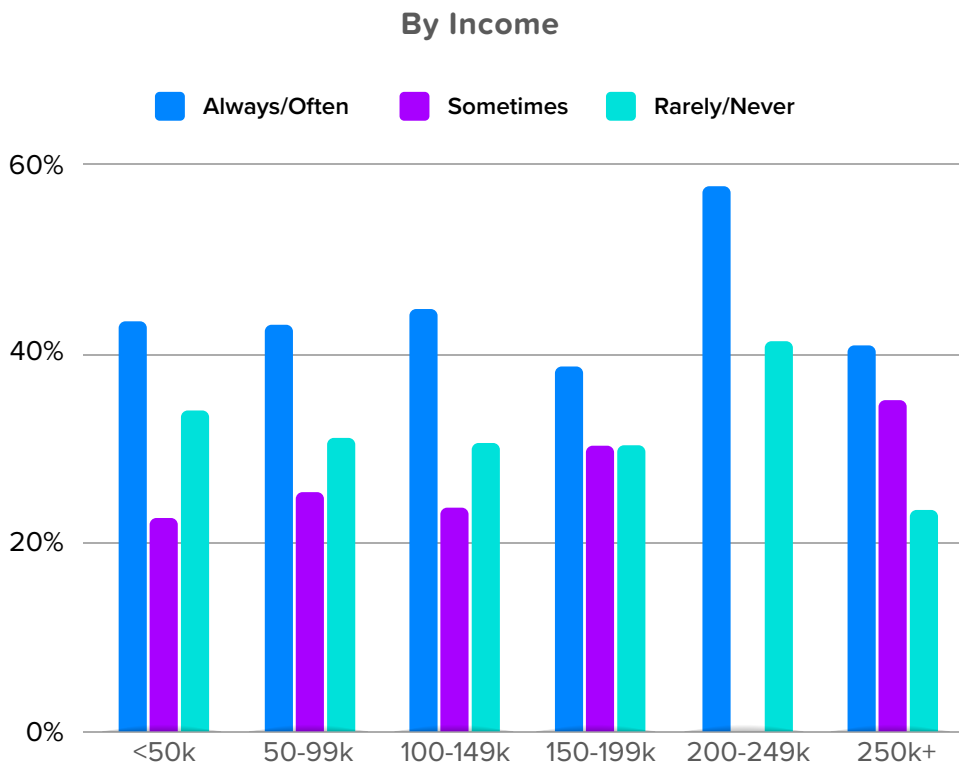
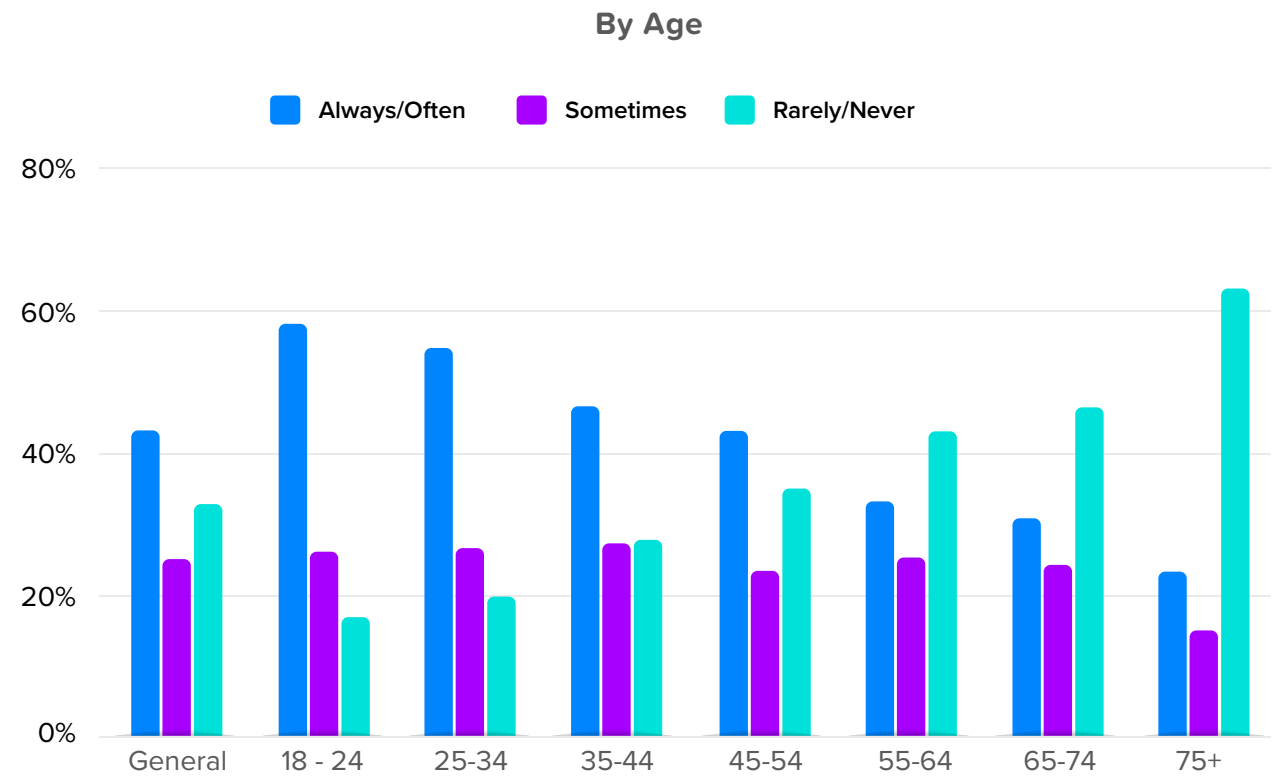
The Question of Multitasking

So, are players multitasking while playing games? For 68%, the answer is yes and falls somewhere between sometimes and always. When asked, the largest percentage of respondents answered with “often” at 28%, followed by “sometimes” at 25%. Interestingly, the next largest response was “never” at 19%, which means that approximately one-fifth

of the audience has exclusive engagement with mobile games (check out Chapter 2 again for some thoughts on what they might be playing with that focus). That being said, even when multitasking, the mobile game itself commands the lion’s share of engagement while being played. Users must engage visually and physically to move gameplay forward.



How Often are you Multi-Tasking While Playing Mobile Games?



When broken down by age, the differences in behavior by generation are brought to light.

Unsurprisingly, always/often peaks at 18-24 years old and steadily declines as the age brackets increase. On the flip side, rarely/never peaks at 75+ years of age and declines as the age brackets decrease. We also see that younger generations are much more

likely to multitask while playing. Gen Z and Millennial generations have had smartphones at their disposal for the majority of their adult lives, if not their whole lives. They've grown accustomed to looking at multiple screens and toggling between numerous devices. Multi-tasking is an expected way of life. Alternatively, older generations are more accustomed to partaking in discrete activities and then switching their attention.

It's interesting to note that these answers do not vary greatly by income bracket. The trends stay consistent despite household income.



What else are they doing?

The obvious next question is: What are the multitaskers doing with their attention? For the vast majority, the answer is “watching TV.” Overall, when given the opportunity to select as many answers as needed, 60% of respondents chose “watching TV.” The only other two responses that garnered more than 20% were “listening to music” and “eating or cooking,” at 46% and 38% respectively.

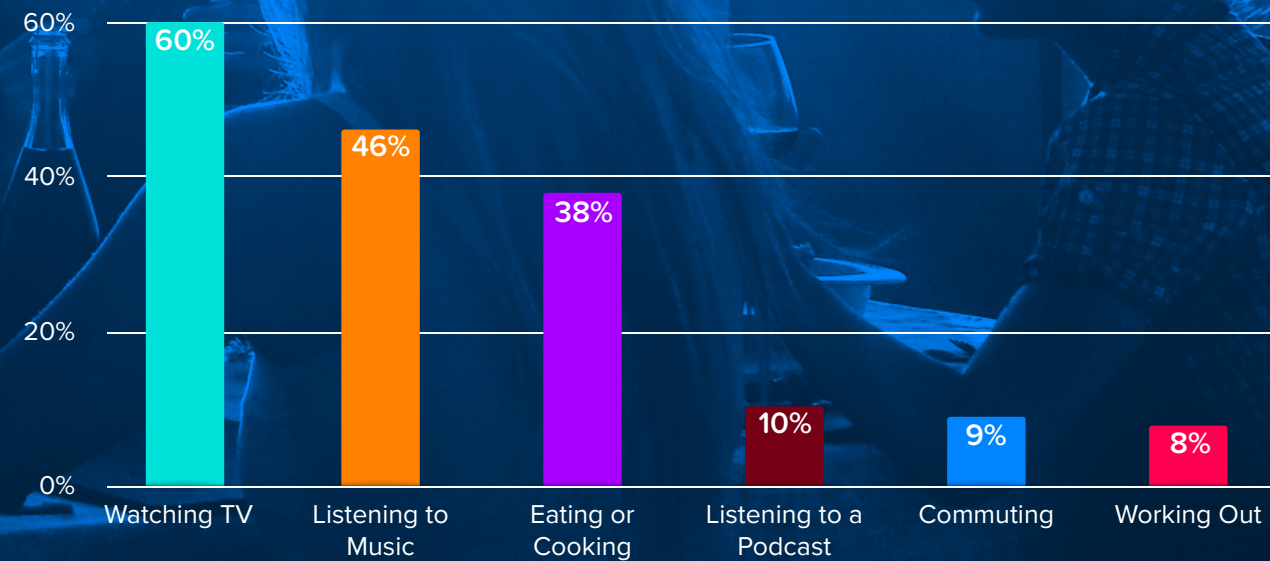
What does this tell us? TV is increasingly becoming the second screen for most consumers, even though conversation across the media has been the smartphone as the second screen. As mentioned earlier, mobile games command the lion’s share of engagement. Even while watching television, users are looking at mobile devices and physically interacting with them to move games forward. As a result, the TV becomes the background noise while mobile games are the focus.

If we think about the attention split for even the best OTT services, commercials are breaks in attention consumers immediately swap to their phone, even if they’ve been

paying attention to the show itself for a while. Regardless of how immersive a TV show might be, attention goes back to the phone. And that’s assuming the TV show captures their full attention to begin with, which clearly isn’t the case most of the time. Not every show is as engrossing as AMC’s “Better Call Saul,” or as cliffhanger-laden (and commercial free) as HBO’s “Westworld.”

What does this mean from an advertising perspective? Mobile gaming is an effective way to capture audience attention and drive engagement with a brand’s content. Regardless of what is going on in the background, your phone and thus your mobile game, have made the transition to the “first” screen — the most valuable position for advertisers.

The next chapter will delve into consumer responses around the number one method of advertising in mobile games, and the reason breaks in gameplay don’t mean users’ attention is lost in the same way it drifts during a commercial with TV audiences.



Chapter 5

Rewarded Video Versus In-App Purchases



Methods to Monetize: Rewarded Video and In-App Purchases

With a massive worldwide audience, mobile gaming has presented lucrative opportunities for game developers. Because most mobile games today are free-to-play, developers choose from a number of methods to monetize their titles. The most commonly used are rewarded video ads and in-app purchases. In AdColony's Mobile Publishing Survey, results showed that 80% of publishers use rewarded video ads to monetize apps while 68% use in-app purchases. Rewarded video ads utilize the principle of value-exchange. After watching an ad, the user obtains access

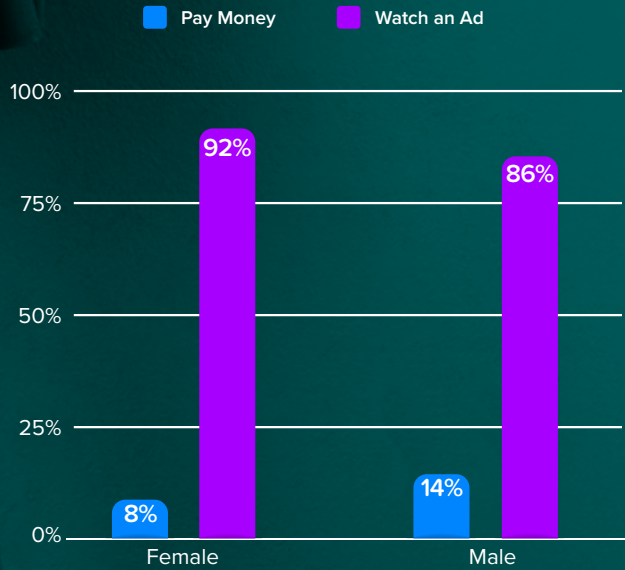
to valuable in-game rewards (not real currency). Rewards can range from an extra life for a player to coins or hints that help users and extend gameplay. On the other hand, in-app purchases offer similar rewards for a small fee. When asked for their preference, an overwhelming amount of respondents choose to watch an ad for rewards over paying money. Developers are likely concerned about their game's user experience when incorporating ads, but these findings can reassure them. If rewarded ads are executed effectively, users will remain satisfied with the gaming experience.

90% of respondents choose to **watch an ad for rewards** over paying money

Rewarded Video Ads are Preferred By All Demographics

While we know the majority of mobile gamers prefer rewarded video, let's take a look at the age and gender breakdowns to get a better understanding of players' preferences and what's behind them. Only 8% of females preferred to pay money for rewards in comparison to 14% of males. Although this is a small margin, it is important to highlight because it speaks to the difference in

attitudes toward mobile games. Historically, the gaming audience has primarily consisted of males but has diversified over time. Many women are enthusiastic and committed players but are not yet willing to shell out as much as men who are more likely to have invested money into games throughout their youth and adulthood.

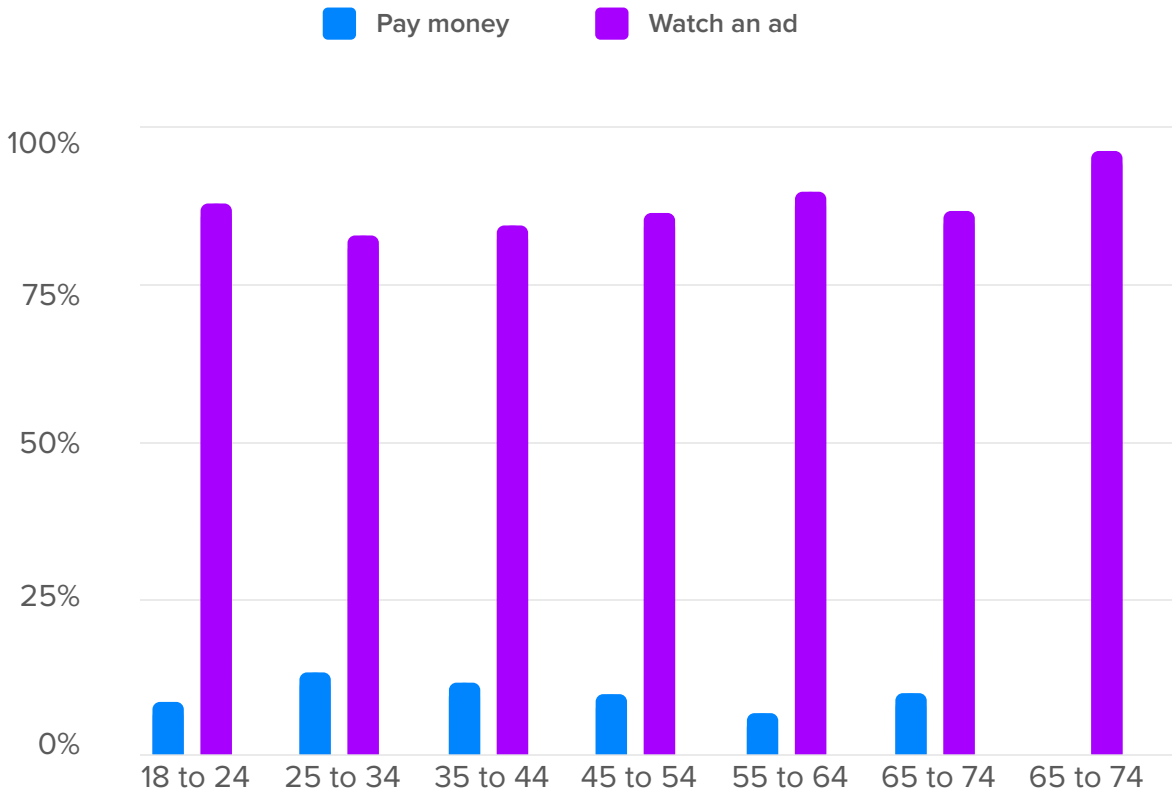


Millennials Are Most Likely to Make Purchases

Breaking down the results by age reveals a few nuanced details on purchase behavior. Every age group overwhelmingly favors rewarded video ads. It was the resounding choice for those aged 75 and up with 100% of respondents from that group choosing rewarded video. Mobile gamers aged 25 to 34 still mostly prefer to watching ads for rewards but are the most likely to

pay money. American millennials have seen gaming evolve through its console and desktop iterations and have now transferred some of their time and money to the mobile platform. Having grown up in the digital age, millennials can now use some of their disposable income on in-app purchases even if there are free options.

By Age

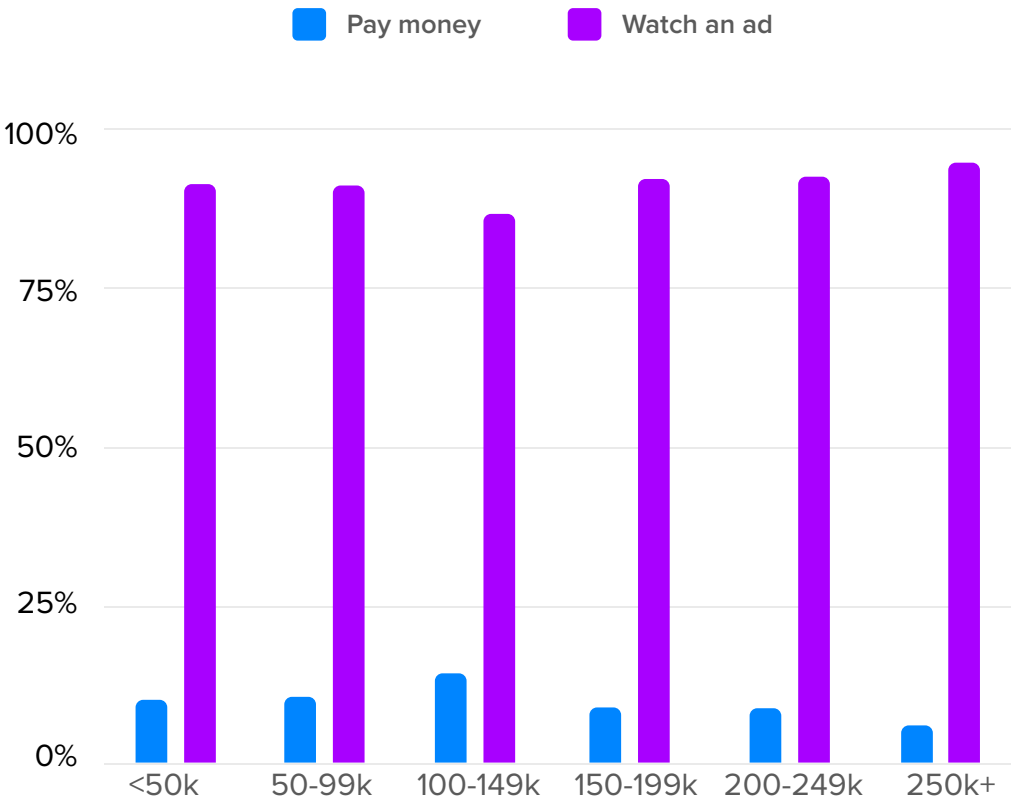


Watching Ads is Convenient for All Income Brackets

If given the choice, would those with high income be more willing to pay for rewards rather than watch a rewarded video ad? Not necessarily. According to survey results, rewarded video is still the top choice across all income brackets. In fact, those with household incomes of more than \$150,000 had the highest shares preferring rewarded video. The choice to

watch an ad for free bonuses does not seem to be based on the amount of income earned but rather, how the player feels that income should be spent. Despite having the means to pay for rewards, most high-earners still find it more convenient to spend some time watching an ad than spend money.

Preference by Household Income



Every age group overwhelmingly favors **rewarded video ads**

Rewarded video is still the top choice across all income brackets

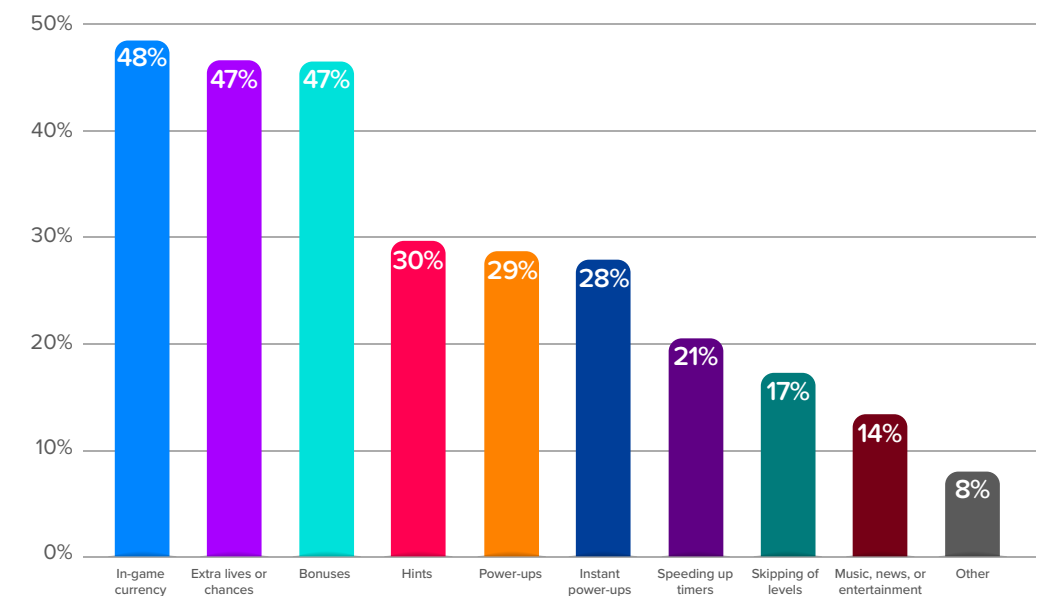
Almost half of all respondents chose in-game currency, extra lives/chances, and game bonuses as their **preferred rewards**

What Are Mobile Gamers Willing to Watch Ads for?

Mobile gamers have given their approval of watching video ads for rewards, but exactly what kind of rewards are they looking for? Offering the right kind of reward is crucial to ensure that ads are not seen as intrusive or bothersome. Respondents were asked to pick the types of rewards they would be willing to watch ads for.

On the other hand, only 14% of respondents said they were willing to watch ads for bonus content such as music, news, or video entertainment. While that type of content is valued on other platforms, users want rewards that are relevant to the game they are playing at that moment.

Almost half of the respondents chose in-game currency, extra lives or chances, and game bonuses as their preferred rewards.



The rewarded video ad is the preferred model of monetization for mobile gamers because they understand the value exchange of their attention for the ability to progress in the game without having to pull out their wallets. Developers who serve these ads will be able to gain revenue

without compromising user experience or retention rates. Because users opt-in to rewarded video, brand advertisers will know viewers will be more engaged and could drive better brand recognition and message recall from their ads.

Chapter 6

The Gamer Stereotype – All Wrong



Gaming as a category and as an opportunity has grown steadily over the past few years – and has accelerated even more over the past six months. Yet there is still a pervasive stereotype of gamers, held by both marketers and consumers. We’ve spent the bulk of this report breaking down the stereotype of gamers when it comes to mobile – they’re not “gamers,” they are your neighbor, your aunt, uncle, parent, grandparent, teenager, doctor, teacher, delivery driver, and so on.

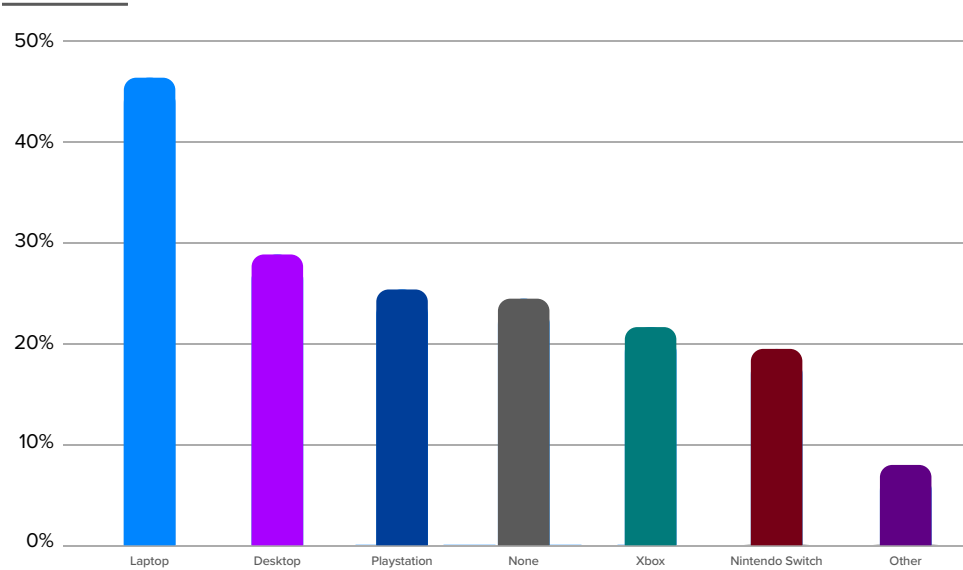
However, the fact remains that gamers as a group are still unfairly stereotyped as young males, shouting obscenities over online chat while playing on their PC or console. They are seen as a low-HHI group, those with unreliable income who live with their parents and have no desire to be financially independent or take on adult responsibilities.

Not only does that stereotype not hold true for mobile gamers, but it’s remarkably inaccurate even for what we would consider “core gamers.” The rise of “nerd culture” at large has brought with it a general acceptance of video games as a legitimate hobby. Additionally, there are a critical mass of millennials and Gen X who grew up with Nintendos and PlayStations and never “grew out of it” no matter how well-established in their careers they may be.

So what do actual gamers look like? We already know from Chapter 3 that most groups are hesitant to self-identify as “gamers” (with millennials being the highest at 40.2%). The best way to look at this is by the gaming devices they own beyond their smartphones.

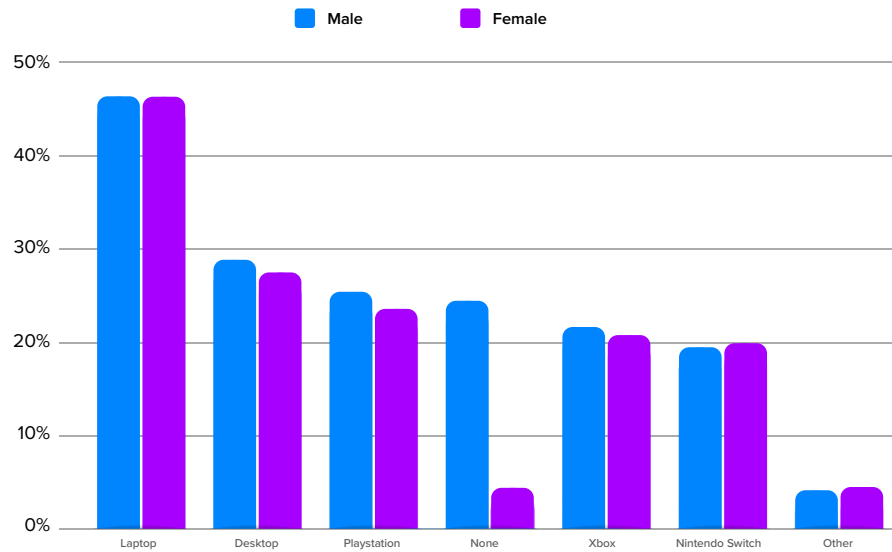
19.9% of women own a Nintendo console vs **18.5%** of men

What other gaming devices do you have in your household?



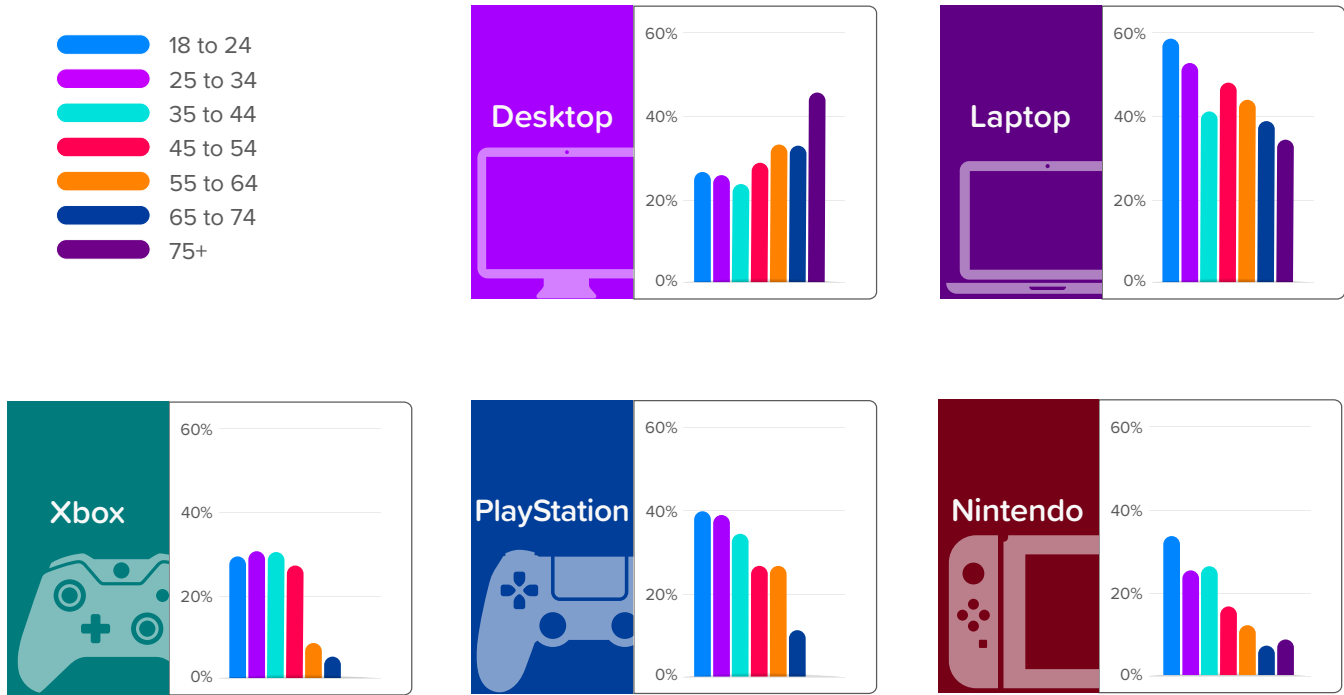
Many people have multiple gaming devices in their household. But let’s look at the core fact here: **More than 75% of households have a game console or computer they use to play games.**

The gender split is the first real part of the stereotype we can break down. Nintendo consoles are actually more popular amongst women than they are with men. Women even have more “other” consoles than men. This could be classic “retro” consoles like Sega Dreamcast or newer connected streaming-only systems like Google Stadia.



Even with other named gaming devices like Xbox and desktops, women lag only slightly behind men. Xbox, in particular, has a very close gender split for consoles and is a testament to Microsoft’s holistic “for everyone” approach and its Xbox advertising and PR strategy, which heavily features women and a wide variety of ethnic backgrounds in conjunction with males.

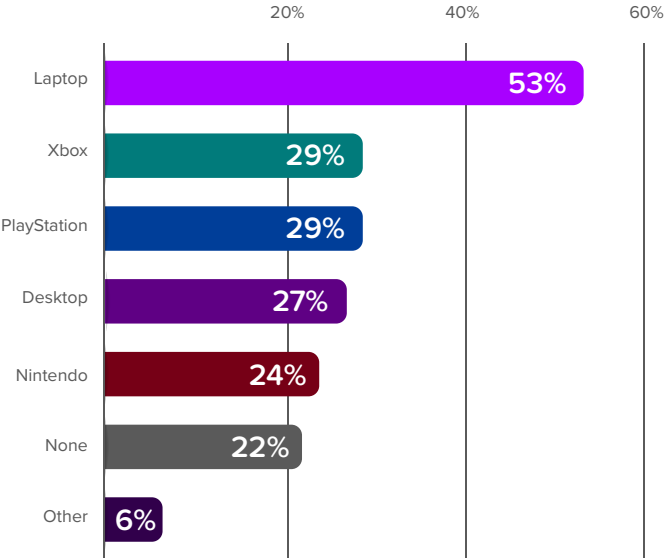
What About Age Group?



As you can see, the idea that all gamers are young males is **clearly wrong**



For Spanish speakers, Xbox, PlayStation and Nintendo are incredibly popular, and non-ownership of non-smartphone gaming devices is higher than the overall averages.



What About Console Generations?

In avoidance of potential confusion and misrepresentation of individual console versions, respondents were simply asked about the brands of gaming consoles they have in their homes. One need only look at the consumer confusion over the Wii U and Xbox One X (and the upcoming Xbox Series X) to appreciate how similar, non-numeric generational differentiators can lead to inaccurate responses, despite an individual's best efforts to answer honestly.

Furthermore, as the objective of the study was to ascertain media consumption preferences, the specific age or version of their gaming devices was not as imperative for this research. Rather, stratification of respondents by HHI and other demographic factors were sufficient for the typical presumptions one would make based on ownership of a given piece of hardware. Similarly, as the current generation of consoles have each been out for some time (with the most recent release being the Xbox One X in November of 2017), early adopter stratification would be a moot consideration at this point.

Finally, as modern consoles have embraced backwards compatibility, the delineation between the content consumed on each generation have furthermore blurred.

An Xbox One X (released in 2017) is able to play any Xbox One game, even though the original Xbox One was released in 2013. Likewise, the Playstation 4 Pro (2016) can play everything made for the standard Playstation 4 (2013). The Nintendo GameCube totally replaced the Nintendo 64 in that same time frame and used discs instead of cartridges.

The Xbox Series X, Microsoft's next console, will be able to play most of those Xbox titles as well. The PS5 will have similar backwards compatibility.

As a result, for many console owners, the distinction between generations doesn't matter, as long as they can play the games they want. As consoles themselves have gotten closer to what we might identify as a PC with their components, the lines have blurred between generations as well.

Another component of the gamer stereotype is that they're not particularly educated or accomplished – perhaps pictured as dropouts who'd rather be fragging their opponents in a shooter than studying. So we looked at education levels across respondents with consoles. This is clearly not the case when we look at console PC ownership by education level.

1/5 of those with a Bachelor's degree own an Xbox...

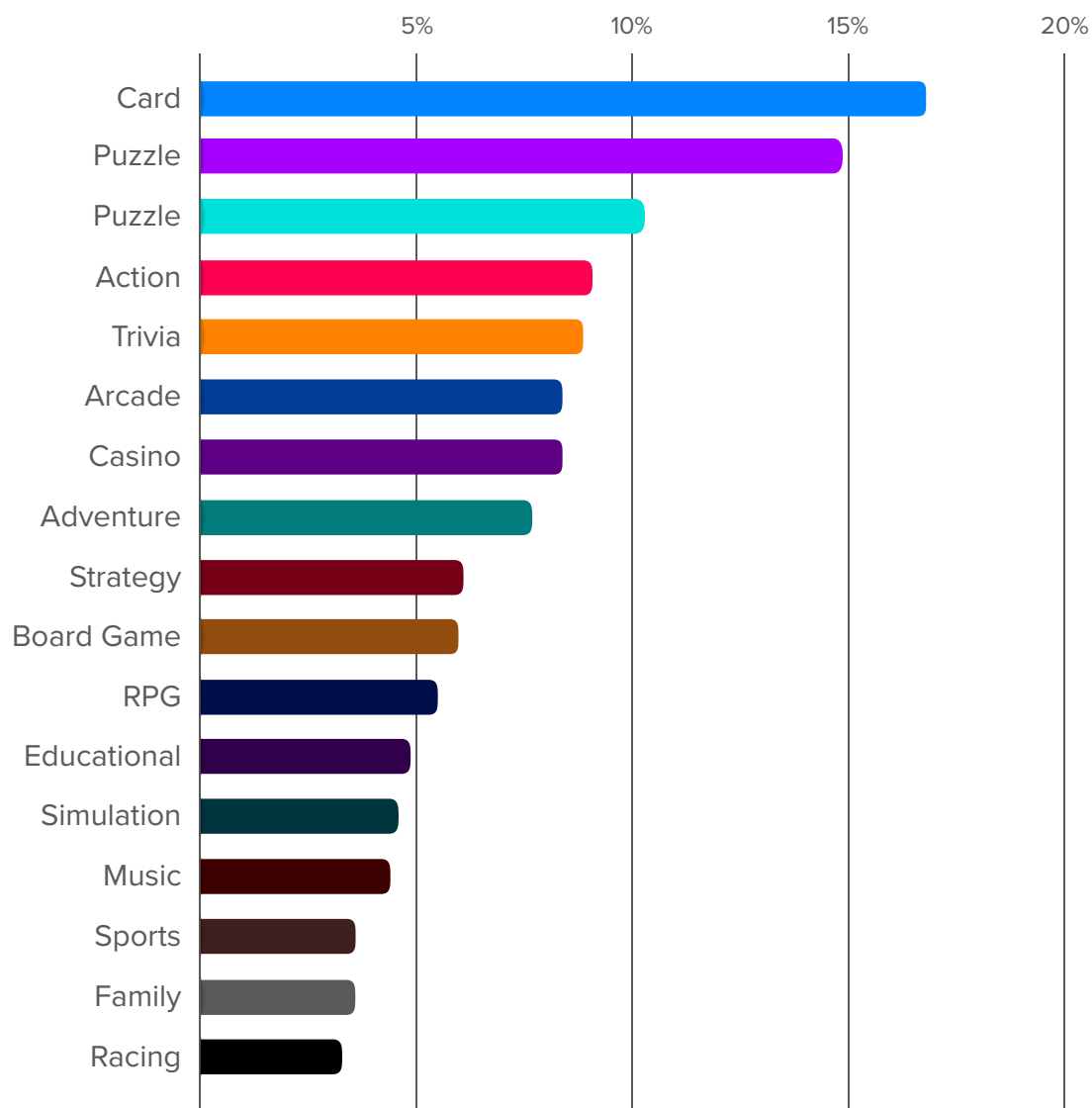
	No GED	High School	Some College	Trade School	Associates	Bachelors	Some Postgrad	Masters	Doctorate
Desktop	24%	24%	30%	35%	31%	28%	36%	31%	22%
Laptop	32%	43%	46%	40%	47%	46%	62%	53%	52%
Xbox	24%	22%	22%	19%	27%	21%	21%	17%	19%
PlayStation	34%	26%	27%	22%	20%	25%	28%	26%	22%
Nintendo	27%	15%	23%	16%	20%	19%	15%	21%	22%
Other	5%	4%	4%	0%	3%	7%	5%	2%	4%
None	29%	29%	21%	26%	26%	22%	15%	26%	33%

25% of those with a Bachelor's degree own a Playstation!

More than one-fifth of those with a bachelor's degree own an Xbox. The same is true for those with some post-grad work. More than 25% of those with masters' degrees have a PlayStation! In fact, the lowest incidence of having no game consoles actually falls in the "some post-grad" and "some college" education levels. Nintendo's universal appeal continues with higher education levels. After a 4-year degree, ownership actually goes up to those with doctorate degrees or the equivalent. Desktop gaming usage is highest amongst those who finish trade school and have finished a four-year degree

and started some work on post-graduate studies, followed by a bachelor degree, then a full associate degree. Laptops also get significant gameplay time. While gaming laptops are still generally seen as less capable than desktops, they're still incredibly popular for gaming with an average of almost half of households, including 53% for those with bachelor's degrees or higher. This doesn't mean they're playing high-end releases from Activision, but it does include Facebook games and light/casual games, like card, puzzle and word games. We can see this when we look at the categories that are most popular on laptops.

What types of games do you play on your laptop?



Popular PC Components

NVIDIA GeForce RTX 2080 Ti

Stream Processors	4,352
Core Clock	1,350MHZ [1,635MHz Boost]
Memory	11GB GDDR6
Memory Clock	14Gbps
Power Connectors	2x8-pin
Outputs	3x Displayport 1.4 1xHDMI 2 1xUSB-C

\$1,200 MSRP



AMD Ryzen 9 3950X

Architecture	Zen 2
Socket	AM4
Cores/Threads	16/32
Base Frequency	3.5GHz
Top Boost Frequency	4.7GHz
TDP	105W

\$700 MSRP



Income Level

Another part of the stereotype that warrants dismantling is the income level of gamers. Having already reviewed the data surrounding education level, these figures shouldn't come as a surprise.



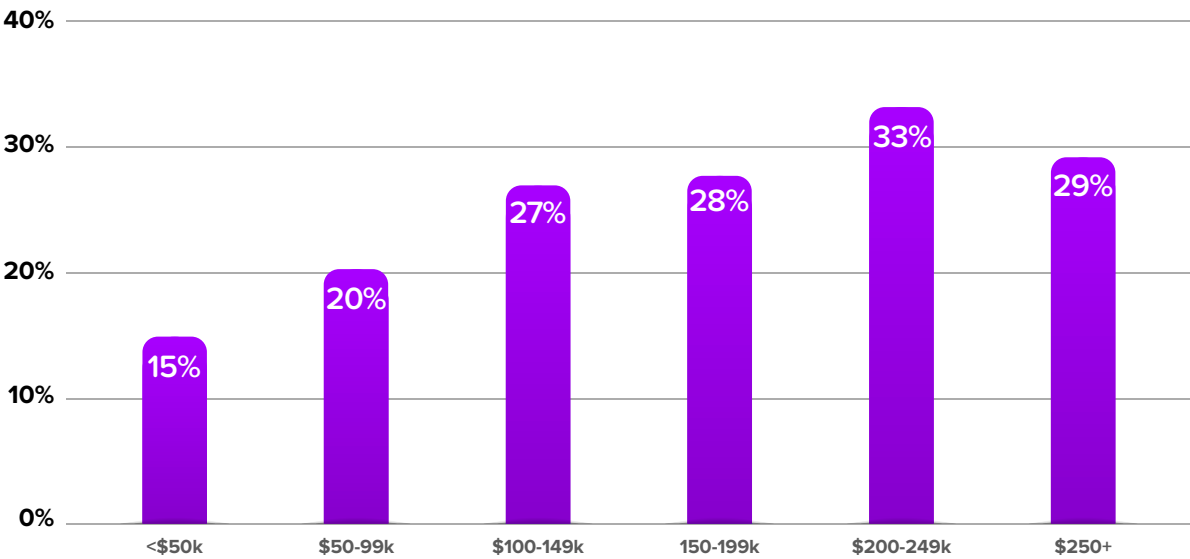
	<\$50k	\$50-99k	\$100-149k	\$150-199k	\$200-249k	\$250k+
Desktop	27%	31%	27%	36%	16%	47%
Laptop	43%	48%	54%	58%	41%	52%
Xbox	18%	19.9%	32%	30%	25%	41%
PlayStation	23%	27%	30%	16%	25%	23%
Nintendo	14%	20%	27%	27%	33%	29%
Other	4%	4%	2%	2%	0%	5%
None	26%	23%	18%	25%	25%	11%

Generally speaking, the higher the income, the more likely people are to have a gaming desktop. This is no surprise given that desktop gaming PCs can be three to ten times more expensive than their console counterparts. Indeed, individual components, such as a good graphics card or processor, can each cost as much or more than an entire console, running up the bill quite quickly (and still requiring the occasional upgrade). Gaming laptops likewise can be quite expensive to cram all that technology into a tiny, portable shell. Ownership rises with income up to \$199,000 per year before dropping off and beginning to climb again at the \$250,000+ level.

The \$250,000+ income bracket loves Xbox, with more than 40% owning one. Nearly 30% of that same group have a Nintendo console, and almost one quarter have a PlayStation. At the \$200,000 to \$249,000 level, as many people own Xbox consoles as own none. The same goes for PlayStations. Ownership of the Xbox is higher for those earning above \$100,000 than those below – this group is almost 70% more likely to own Microsoft's console than the sub-six-figure bracket. Conversely, those earning less than \$100,000 per year are only slightly (7.3%) more likely to have a PlayStation than those earning more.

Similar to education level, the more that people earn the more likely they are to own a **Nintendo console**, speaking to the Japanese company's **universal appeal**.

Do you own a Nintendo console?



If we were to create a couple of personas for the “average” person with a game console in the US, they’d look very different than the stereotype. If we were to create a hypothetical “gamer” (self-identified or not) for the United States, they’d look even more different. Gaming is a force within the general culture of the country, and almost everyone plays some kind of game from time to time, often multiple times per week. It could be a quick match-3 on public transportation or sitting down for several hours on voice chat with friends.

Doctors are just as likely to be playing as high schoolers are, and career professionals are overall the most likely to do so. Young or old, high income

or low, extremely educated or still finishing up school – almost everyone is a gamer to some degree. The United States has seen a huge increase in the awareness of, and overall dismissing of, stereotypes over the past few years. This is great for society at large. Recognizing neighbors and even strangers as individuals is an important part of our growth as a society.

The gamer stereotype is one that many within that grouping have dismissed for decades, and the data here shows they were right to do so. It’s clear that game developers and advertisers have a huge opportunity by focusing on gaming at large, and mobile gaming specifically, both on a targeted basis and a contextual one.

About the Data

DISQO Mobile Gaming Study - Data Summary

The survey was conducted by DISQO and distributed online to a nationally representative sample of DISQO Audience members within the United States via the Survey Junkie platform, which is wholly owned by DISQO.

The survey was taken on both desktop and mobile devices, garnering a total of 1,208 responses over a fourteen-day period in Q2 of 2020.

As each respondent was a member of DISQO's 100% first-party opt-in research audience, responses were verified against fraud and were compiled against known and validated demographic information, enabling a rich, cohorted analysis by age, gender, education level, household income, and more.





| About **AdColony**

AdColony is one of the largest mobile advertising platforms in the world with a reach of more than 1.5 billion users globally. Dedicated to delivering authentic advertising experiences across today's top apps, trusted by Fortune 500 brands and the top-grossing mobile publishers alike, AdColony helps drive meaningful outcomes for advertisers at scale with the highest quality ads and the highest verified viewability rates on the most viewed and most important screen in consumers' lives.

Originally founded in 2008 as a mobile app developer, AdColony has been an innovation leader in mobile advertising and monetization since Apple first introduced the App Store. AdColony is passionate about delivering the highest quality video advertising, full screen interactive rich media ads, and beyond. AdColony is committed to delivering an experience that makes in-app mobile advertising a win for advertisers, developers, and users alike. AdColony is known throughout the mobile industry for its unparalleled third-party verified viewability rates, exclusive Instant-Play™ and Aurora™ HD video technologies, rich media formats, global performance advertising business, programmatic marketplace, and extensive SDK footprint.

A fully-owned subsidiary of Otello Corporation, AdColony is a global organization with over 20 offices worldwide.



DISQO

| About **DISQO**

DISQO is a next-generation consumer-first insights platform that delivers unprecedented data and analytics to the market research industry. The company powers insights professionals and marketers with automated solutions that drive consumer research and improve ad effectiveness.

Today, DISQO delivers an accurate and complete view of the consumer journey via technology built on the foundation of first-party research from millions of engaged consumers. By engaging consumers who choose to share their attitudes and behaviors, DISQO captures the highest quality data, empowering its clients to make confident decisions.

Founded in 2015, DISQO is headquartered in Los Angeles, California, and has over 160 employees.

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