



Entertainment in the Age of COVID-19

Harvard College Consulting Group

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2. Executive Summary

The HCCG team conducted a combination of primary and secondary research to explain the current and future trajectory of the entertainment industry and found **three key patterns** that explain most of the other trends.

INCREASED SCREEN TIME

1

During the COVID-19 quarantine, individuals have increasingly relied on their **electronic devices** as their primary form of entertainment. All generations saw an increase in device usage, with Gen Z users seeing the largest spike in smartphone usage at **82%**.¹ The result has been a forced acceleration of previous trends, including the **slowing growth of movie theaters and the rapid expansion of content streaming platforms**. The overall trend, however, has not occurred homogeneously. Some individuals have embraced the ability to use their devices endlessly, while others have consciously monitored and limited their screen time.

2

DESIRE FOR CONNECTEDNESS

With quarantine preventing most in-person interactions, individuals find themselves struggling to stay connected with friends and family. **Social media platforms, gaming, and other online platforms have become substitutes for traditional social experiences**. Individuals have looked towards Zoom calls, artists' live streams, and even Twitch streams to temporarily replace traditional conversations, concerts, and couch gaming. Without actively interacting with their friends online, many have cited **feeling as though they are excluded and disconnected**. Previously just a mechanism of enhancement for individuals' social spheres, online media have become essential tools for individuals to escape the isolation of quarantine.

POST-COVID BOOM

3

Once in-person entertainment activities are again available, many predict a **dramatic shift from solely online activity to mostly in-person interactions**. There is some division about when exactly this will occur, with a **53%** majority of survey respondents² responding they will not feel comfortable attending a large sporting event until an effective vaccine is developed. However, most agree that the artificially inflated device usage during quarantine is wearing on them and that they will **seek in-person interactions whenever possible**.

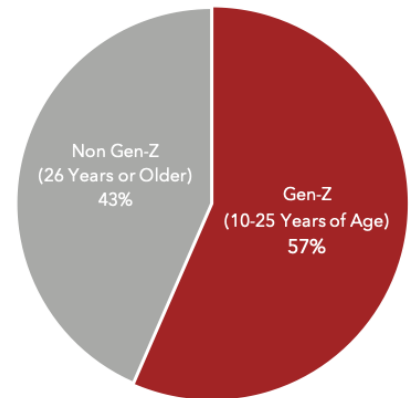
¹ Statista

² HCCG's June 2020 Entertainment Survey

3. Methodology

To examine the impact of the virus on the entertainment industry, the HCCG team conducted a **survey of 629 Harvard affiliates** (partial responses included), collecting data on their weekly time spent on a variety of entertainment activities prior to COVID-19 and during the quarantine, as well as their projections for the recovery period and after COVID. In this paper, the recovery period represents when people are slowly returning to workplaces with **social distancing and mask-wearing** mandates still in place. After COVID represents the period immediately after when those restrictions have been fully lifted due to **a vaccine or decreased prevalence of the virus**.

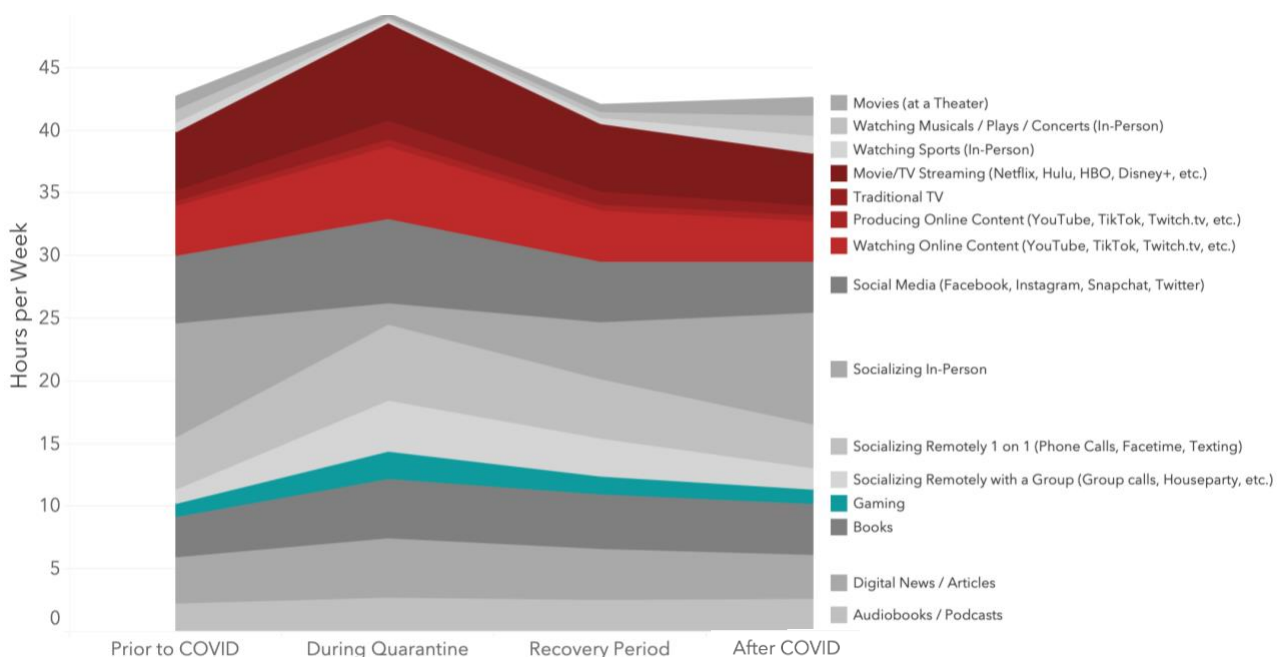
Survey Participants by Age



To better understand the entertainment preferences of Gen Z consumers, the team also conducted **six focus groups** consisting of Harvard undergraduates. All of this data was then synthesized with existing research to provide a detailed picture of the entertainment landscape as it pertains to each of the five sectors below.



Exhibit 1. Participants’ average weekly time spent on each of the five entertainment categories reveals that the reduction in live content was largely offset by increased content streaming during the quarantine.



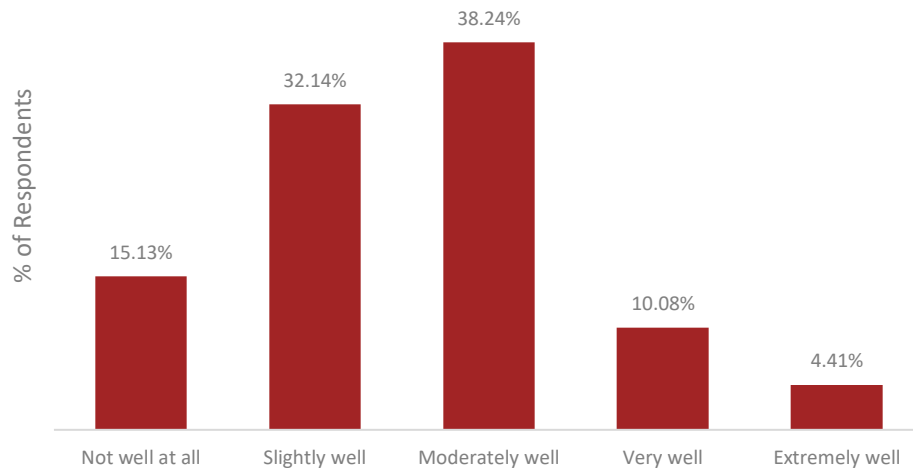


4. Live Content

HCCG first explored the Live Content sector, which includes **in-person entertainment options such as movie theaters, concerts, and sporting events**. Although the in-person entertainment market heavily suffered from COVID-19 social distancing restrictions, there is **potential for rebound in certain markets** where the energy and social atmosphere cannot be adequately replicated by streaming platforms.

Exhibit 2. Only a minority of survey respondents believed remote entertainment options could effectively replace their in-person counterparts.

Source: HCCG's June 2020 Entertainment Survey



4.1 Prior to COVID-19

The Movie Theater market, although projected to slow in growth due to competition from alternative streaming services, continued to reach an **average revenue growth rate of 1.5%** in 2020. This is **lower in comparison to the average yearly growth rate of 2.4%** from 2015-2020, but **still higher than the U.S. economy overall**.³

The resilience to increasing competition stemmed from **the environment** that movie theaters fostered. Focus group participants discussed how theater amenities amplified their enjoyment of the movies.



As a result, many participants agreed that **streaming movies from home could not fully replace the experience of being in a movie theater**. However, due to ticket prices being more expensive than streaming subscriptions, participants often agreed that only the biggest movies of the year were worth watching in theaters.

³ [bisworld](http://bisworld.com)





The Concert and Live Music market grew **12.9%** as the **average revenue per user grew by 5.8%** to \$70.65 in 2019.⁴ Focus group participants were particularly **attracted to the atmosphere** that concerts created: being surrounded by hundreds of people, interacting with their favorite artists, and enjoying their favorite songs. In the HCCG survey, **30%** of participants spent an average of 1 to 3 hours or more at a concert, live music, or theatre event every week, indicating a **persistent demand** for live events. This figure may be high because many of the survey participants are Harvard undergraduates who may be anticipating attending acapella and arts performances on campus.

“ I’m willing to pay for concerts if I really like the artist and know all their songs. ”

Live Sporting Events also created an atmosphere that could not be replaced by streaming platforms. Focus group participants said they primarily went to sports games to **socialize and show their team spirit**. The NFL has been a prime example of people’s interest in attending sports events, with each game bringing in an average of 66,151 people.⁵ Furthermore, **21%** of survey participants spent an average of 1 to 3 hours or more at a sports game every week. Thus, the persistent base of die-hard sports fans is unlikely to be satisfied by digital replacements given the **unique energy and excitement** that comes from supporting their favorite teams in-person.

4.2 During Quarantine

The Live Content sector **was one of the hardest hit** by COVID-19 social distancing and quarantine measures. Almost all movie theaters closed, and almost all concerts and sporting events were cancelled or held behind closed doors. As a result, people turned to **alternative forms of entertainment such as streaming platforms** that could not fully match the atmosphere of live events but could at least serve as a temporary substitute.

Focus groups participants were **heavily affected** by closures of movie theaters and concerts.

“ Streaming platforms have helped me adjust but haven’t improved my enjoyment of movies. ”

“ [Streaming platforms] are a really really really horrible substitute to attending events in person. ”

“ Watching things by myself during COVID-19 reaffirms that I am separated from my friends. ”

Source: HCCG’s June 2020 Entertainment Focus Groups

“ I really miss dancing. ”

“ [In-person concerts] feel more intimate. ”

⁴ Statista

⁵ Statista

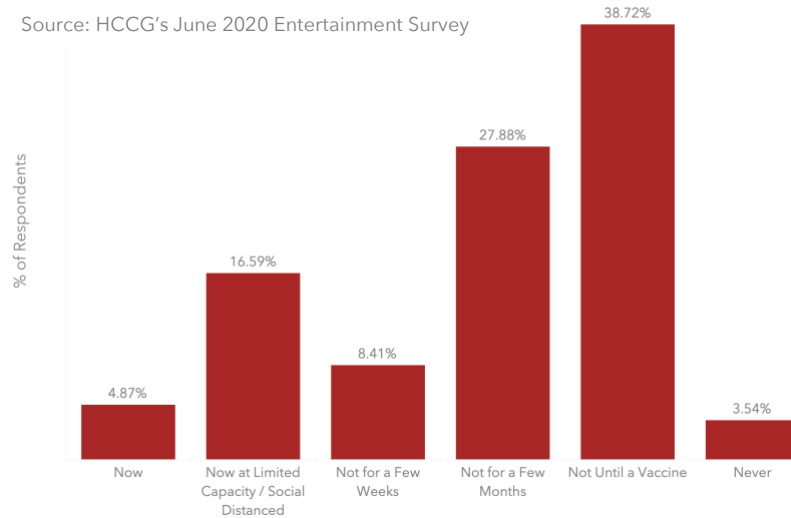




4.3 Recovery Period and After COVID-19

The recovery period is likely to be characterized by a **slow and shaky rebound** for Live Content as the risks of COVID transmission remain high with in-person contact.⁶ Focus group participants possessed **widely varying opinions** about the safety of attending live events post-COVID. Some participants said they would currently be willing to go to a socially distanced event with masks, while others rejected the idea, preferring to wait until a vaccine is developed. All in all, participants concluded that in-person entertainment options would **continue to struggle until the virus is effectively controlled**. Once controlled, however, participants agreed that people naturally tend to congregate, so they would probably revert to their old habits of attending movie theaters, concerts, and sporting events as soon as they feel safe again.

Exhibit 3. Survey responses varied regarding how long participants project the recovery period to last, but the largest portion of respondents won't feel comfortable at a theater or large live event until a vaccine.



Outlook on Movie Theaters in our focus groups ranged from being **willing to try new experiences** like drive-in theaters to **thinking that the industry would soon go out of business**. A few participants said that they would be fine with going to movie theaters now, while everyone else commented that their health concerns and the rise in convenience of streaming services made movie theaters much less appealing. After COVID, the portion of respondents who anticipate averaging more than 1 to 3 hours a week in movie theaters is actually **14% higher than prior to COVID-19**, foreshadowing a boom in post-COVID activity to compensate for the restrictive quarantine.

“ I used to go to movie theaters as bonding time with my dad, so I'll probably continue to go once they reopen. ”

↔

“ If movie theaters were gone forever, it wouldn't take away from my life. ”

⁶ CDC



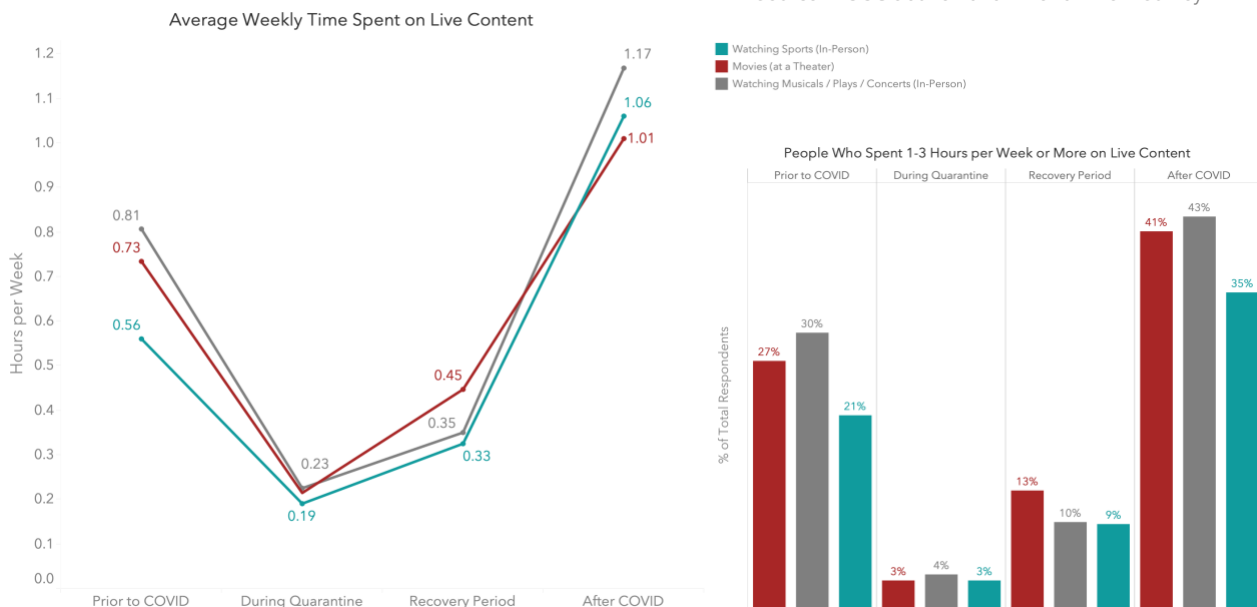


Concerts and Live Music Events had the **best outlook after COVID**, with all focus group participants agreeing that concerts will be the one in-person entertainment option that **never dies out**. They commented on the **urge to dance** and agreed that there is no replacement to being **in the middle of a crowd while “feeling the music”**. Thus, even with COVID-19, the most avid music fans still want to go back to concerts as soon as possible. Those who prefer to wait for a vaccine worry that even if concert venues move outdoors and outside of the city, the excitement will draw out a lot of people who might **be intoxicated or make bad decisions**.

Live Sporting Events had the **weakest outlook during the recovery period** but are projected to see **strong growth after COVID**. Most participants said that they would not go to a sporting event in the near future because it wouldn't be fun to cheer by themselves in a near-empty stadium. Instead, they would prefer to watch sports with friends and family on their TVs. Once social distancing restrictions are fully lifted, however, participants anticipate a boom to as much as **89% higher than pre-COVID levels**.

Exhibit 4. Survey responses indicate that movie theaters will see the fastest rebound in the immediate recovery period following quarantine restrictions, but that live musical events and sports will experience larger booms after COVID due to pent-up demand for social interactions that cannot be adequately replaced by current virtual offerings.

Source: HCCG's June 2020 Entertainment Survey



Although the immediate prospects for in-person events seem low, after COVID, the HCCG survey suggests that there will be a rebound in numbers, with the **average weekly time spent on Live Content increasing to even higher levels than prior to COVID-19**. This projection may be driven by people wanting to compensate for the months spent without live entertainment, with many participants mentioning how much they miss in-person events with friends. However, until a vaccine is released, most in-person entertainment options will continue to see limited attendance.





5. Streamed Content

5.1 Prior to COVID-19

Even before the pandemic, 2020 was set to mark a major turning point in the movie and television streaming industry. Longtime market leader **Netflix was experiencing slowing subscriber growth** due to market saturation in the U.S.⁷, with **53%** of North Americans describing Netflix as an “essential service.”⁸ At the same time, **several big new players** were set to enter the market, including Disney+, NBC Universal’s Peacock, and Apple TV+.

Exhibit 5. Netflix is the leading streaming service in the U.S. but competitors are entering the market.

	Launch Date	Subscribers	Revenue	Pricing Model ⁹
Netflix	Jan. 15, 2007 ¹⁰	61.04MM in the U.S. in Q4 2019 ¹¹	\$9.243B in the U.S. in 2019 ¹²	One Screen: \$8.99 / month Two Screens: \$12.99 / month Four Screens Ultra HD: \$15.99
Hulu	Mar. 12, 2008 ¹³	29MM in the U.S. in Q3 2019 ¹⁴	\$1.938B in the U.S. in 2019 ¹⁵	With Ads: \$5.99 / month Ad-Free: \$11.99 / month
Amazon Prime Video	Sep. 4, 2008 ¹⁶	53.93MM in the U.S. in Q2 2019 ¹⁷	\$2.805B in the U.S. in 2018 ¹⁸	\$12.99 / month + Free 2-Day Shipping
CBS All Access + Showtime	Oct. 28, 2014 ¹⁹	11.2MM in the U.S. in Q4 2019 ²⁰	\$1.6B in the U.S. in 2019 ²¹	With Ads: \$5.99 / month Ad-Free: \$9.99 / month
HBO Max	May 27, 2019 ²²	-	-	\$14.99 / month
Apple TV+	Nov. 1, 2019 ²³	10 MM in the U.S. in Q1 2019 ²⁴	-	\$4.99 / month Free for One Year with Apple Product
Disney+	Nov. 12, 2019 ²⁵	26.5MM in the U.S. in Q4 2019	-	\$6.99 / month \$69.99 / year
Peacock	Jul. 15, 2020 ²⁶	-	-	Limited Programming: Free Premium: \$5 / month or TV Subscription

⁷ [Financial Times](#)

⁸ [Statista](#)

⁹ [USA Today](#)

¹⁰ [Wikipedia](#)

¹¹ [Netflix Shareholder Letter](#)

¹² [Netflix Shareholder Letter](#)

¹³ [Wikipedia](#)

¹⁴ [Disney Financials](#)

¹⁵ [Disney Financials](#)

¹⁶ [Wikipedia](#)

¹⁷ [Statista](#)

¹⁸ [Statista](#)

¹⁹ [Wikipedia](#)

²⁰ [Statista](#)

²¹ [Variety](#)

²² [Business Insider](#)

²³ [Wikipedia](#)

²⁴ [9to5mac](#)

²⁵ [Wikipedia](#)

²⁶ [Wikipedia](#)





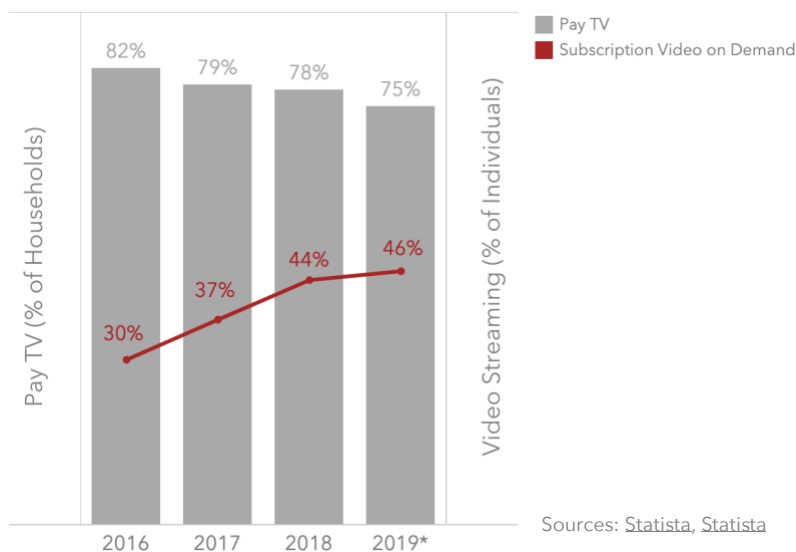
With most consumers indicating they were unwilling to pay more than \$20-30 per month for video streaming services,²⁷ newcomers planned to woo viewers by providing **unique content libraries and bundling subscriptions in order to lower monthly prices**. Examples of subscription bundles include Disney+ and Hulu, Netflix and T-Mobile, and Amazon Prime Video included in Amazon Prime subscriptions. Many consumers also shared subscriptions; Netflix had **61M** subscribers before the pandemic, but **160M** estimated monthly active viewers.²⁸

“ Cord-cutting’s original value proposition was that it was much cheaper than cable TV. If the video subscriptions start to add up to a hefty fee, people will shed nonessential streamers. eMarketer ”

Gen-Z consumers overwhelmingly indicated that they **despise advertisements** on their streaming services. Focus group participants said that they pay for subscription services in order to be **guaranteed high-quality viewing**. The quality guarantee is also a reason why consumers pay to watch a movie on an official streaming site rather than a pirate site where they could stream it for free.

Meanwhile, **cord-cutting continued** as consumers shed their cable and satellite television bills in favor of online services that let them watch on-demand for a far lower price. There are still more households in the US that pay for traditional television channels than those that don’t – **80.5M** versus **48.9M** – but **the gap is narrowing**.²⁹ Before the pandemic, HCCG survey respondents reported spending 0.86 hours per week on average watching traditional TV, as opposed to 4.56 hours per week on movie and TV streaming services.

Exhibit 6. Penetration rates of pay TV vs. subscription streaming services show that while traditional TV still carries a stronger presence, its popularity is steadily declining while streaming services gain traction.



²⁷ eMarketer
²⁸ eMarketer

²⁹ eMarketer



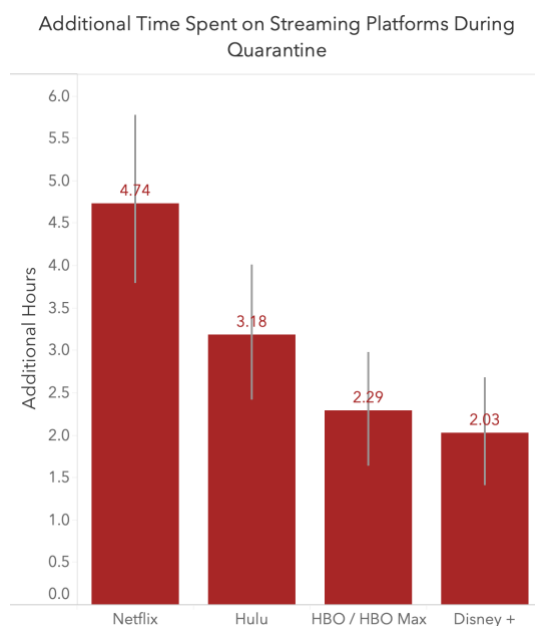


5.2 During Quarantine

Social distancing requirements have led to **massive video streaming growth**, both in terms of time spent on streaming and number of subscribers. The HCCG survey found that people spend **7.76** hours per week on average streaming on-demand movies and TV-shows during quarantine, a **70%** increase from pre-COVID levels. Of the new streaming services, **Disney+ in particular** has seen its success amplified after quarantine began. It reached almost **55M** subscribers at the beginning of May 2020,³⁰ just 6 months after their launch.³¹

Due to the shutdown of movie theaters, some **movies are now being released directly on subscription services** as opposed to making their usual debut on the big screen. Universal Pictures decided to release Trolls World Tour directly on streaming services, causing AMC Theaters CEO to fight back by promising to never play Universal movies in theaters ever again.³² Companies like Netflix that produce new original content released directly on their service have continued to thrive as **viewers are forced to stay at home**.

Exhibit 7. Results from the HCCG survey show that on average, participants spent more time per week on streaming platforms during quarantine, with Netflix leading at 4.74 additional hours.



Not all streaming services benefited from the imposed quarantine. Quibi, a well-backed startup founded by former Disney executive Jeffrey Katzenberg, billed itself as a studio for short, ten-minute entertainment clips meant to be watched on the go on a mobile phone. Despite signing on big stars for Hollywood-style productions, the company struggled, garnering only a small fraction of its expected downloads.³³

³⁰ CNBC

³¹ Business Insider

³² The Verge

³³ The Wall Street Journal





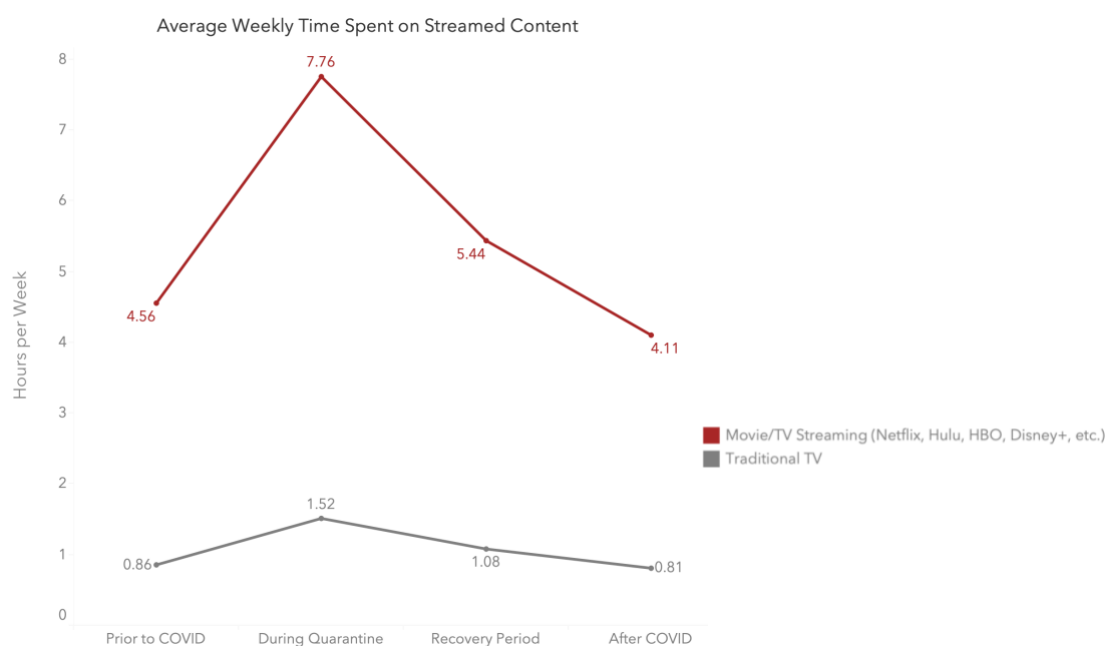
Even as time spent on video streaming increased, **consumer attention spans dwindled**. Many focus group participants noted that they preferred entertainment forms they could let run in the background while doing other things, such as television shows they watched while running or podcasts they listened to while cooking. Others also said they were increasingly finding movies were “too long to watch”, instead preferring TV shows or **shorter form entertainment that presented less of a time commitment**.

5.3 Recovery Period and After COVID-19

During the recovery period, weekly time spent on Streamed Content is **projected to decrease** as live entertainment options begin to re-open and consumers substitute streaming time for those other options. However, due to the nature of the recovery process, not all live entertainment options will re-open at once, so the time spent on Streamed Content will still be **higher during the recovery compared to pre-COVID levels**.

After the economy fully recovers, Live Content will experience a post-COVID boom due to pent-up demand from consumers not being able to enjoy their usual entertainment habits during quarantine. Conversely, streaming options will experience **a period of depressed viewership** as consumers turn away from the activities they exhausted during quarantine and look for alternative entertainment options to take advantage of the return to normalcy.

Exhibit 8. The HCCG survey indicates that participants will cut down on their screen time during the recovery period as more in-person entertainment options reopen. This trend is expected to continue after COVID for both content streaming and traditional TV, with post-COVID levels slightly lower than pre-COVID due to participants compensating for missed activities during the quarantine.





6. Creator Content

Creator Content platforms include TikTok, YouTube, and Twitch.tv. These platforms are defined as places to **stream digital content produced by amateur creators** rather than professional movie or television studios. Users with accounts on these platforms can also interact with content, often through commenting or liking. The Coronavirus pandemic has driven extremely high levels of traffic to these types of platforms, especially amongst Gen Z users.

6.1 Prior to COVID-19

Viewership and engagement have been **steadily increasing** for Creator Content platforms in the last three years. TikTok worldwide downloads experienced an initial peak in Q4 2018 of **205.7M** downloads.³⁴ Twitch.tv boasted **3.64M** monthly broadcasters and **2.3B** hours of content watched in Q4 2019.³⁵ As of May 2019, **500** hours of video was being uploaded to YouTube every minute,³⁶ with roughly **2B** monthly logged-in viewers worldwide.³⁷

Exhibit 9. The age distribution of TikTok skews young, with the user base being predominantly Gen Z. Exhibit 10. eSports platforms like Twitch have a slightly older audience.

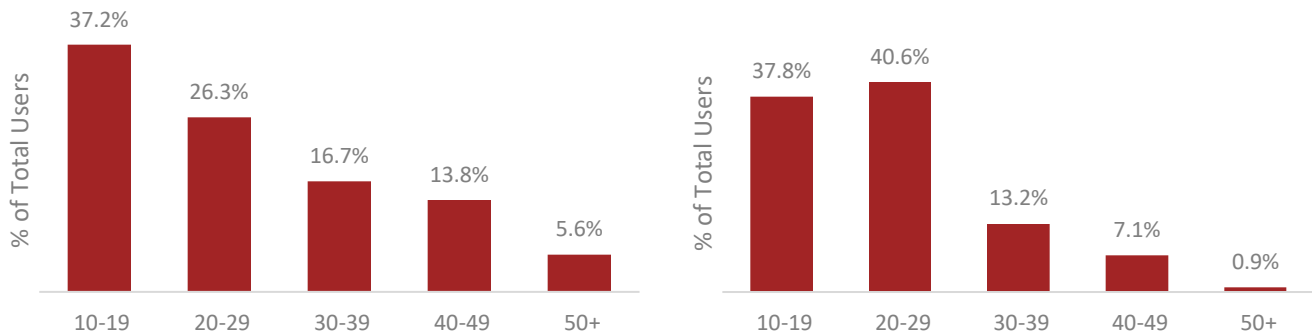
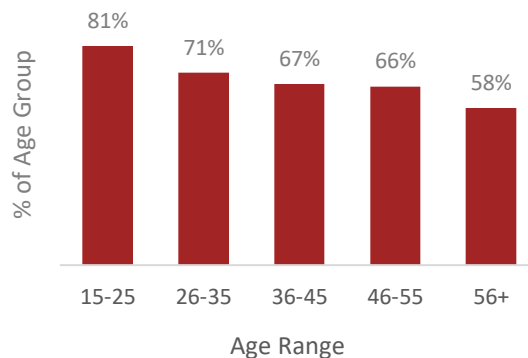


Exhibit 11. Being a more ubiquitous platform, YouTube draws viewership more evenly amongst the different age demographics. The graph below shows the percentage of internet users in each age group that watch YouTube.



Sources: Statista, Statista, Statista

³⁴ Statista

³⁵ Business of Apps

³⁶ Statista

³⁷ Statista



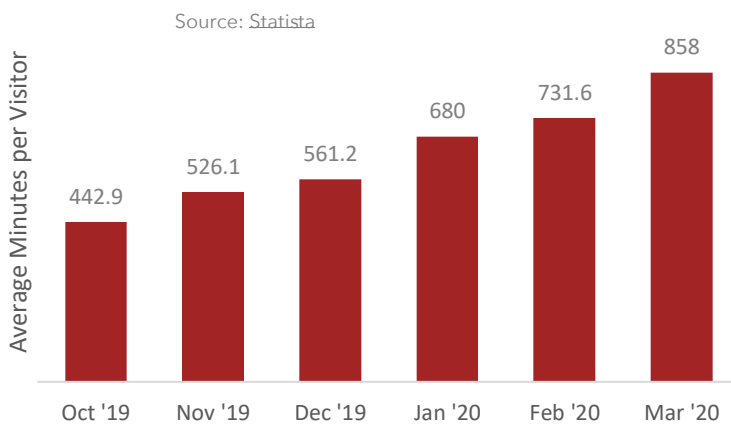


6.2 During Quarantine

Because TikTok’s user base was already growing rapidly prior to COVID, it is difficult to distinguish its expected growth from its growth induced by the pandemic. However, some measures point to **COVID-19 expediting the growth of the platform.**

March 2020 marked a **record high** of **858** minutes (~14 hours) per user per month, and the increase in average monthly minutes from February to March was the **largest increase** since before October 2019.³⁸ Additionally, Q1 2020 simultaneously saw **the start of quarantine and a spike in first-time downloads** the previous quarter.³⁹ Because March was the first month that users were quarantining for the pandemic, this points to **COVID as a cause for the peak of monthly engagement.** TikTok’s **short-form nature** of videos of one minute or less could explain its success as a way to stave off boredom.

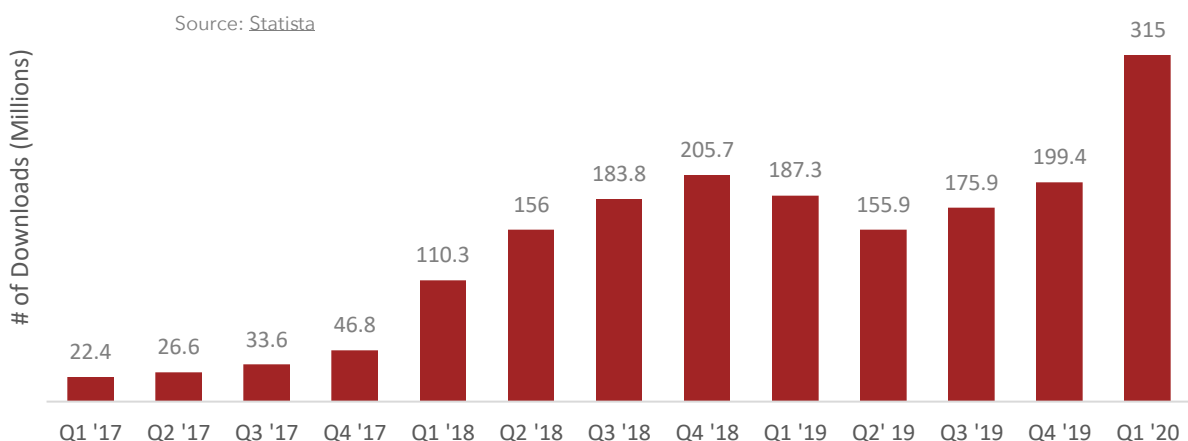
Exhibit 12. Monthly user engagement, or the average amount of time that users spend on TikTok per month, has steadily increased each month in the United States.



With much more time to myself, I just find myself scrolling through quick things like Twitter and TikTok to keep my attention.



Exhibit 13. Q1 2020 marked the most first-time downloads in a single quarter in the TikTok’s history.



³⁸ Statista

³⁹ Statista





Similarly, COVID-19 has created a **captive audience for YouTube creators**. Because the platform is already very well established, YouTube hasn't experienced the same large spike in viewers that TikTok has. However, the pandemic has stimulated user engagement, particularly with **lifestyle, at-home, and workout videos**. Compared to the prior daily average for 2020, mid-March saw percentage increases in views of ^{40,41}

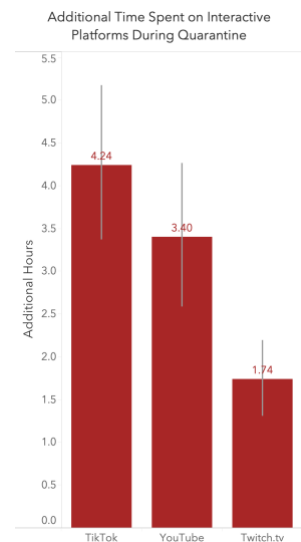
- **~600%** for videos with tags "#AtHome" or "#WithMe"
- **~515%** workout videos
- **~260%** on cooking videos
- **~200%** videos with "self-care" in the title
- **~55%** for meditation videos

“ I started using YouTube a lot more for makeup and hair tutorials. ”

Another creator platform that is primarily used for eSports and streaming, Twitch.tv, has experienced an influx of usage due to Coronavirus. Twitch saw a **10%** increase in viewership and set an all-time record of **22.7M** daily users in March 2020⁴² due to social distancing measures. YouTube Gaming, a similar eSports platform, also saw a **15%** increase.⁴³

Overall, Creator Content has been a **popular entertainment category** for individuals quarantining through the pandemic. When asked about the importance of certain factors for their entertainment habits during quarantine, focus group participants valued:

1. Interest in Content
2. Convenience
3. Pricing



These values speak to the surge in Creator Content engagement since platforms like TikTok and YouTube are **completely free, accessible on any smartphone, and generate a continuous stream of new content** as new users and creators join the platforms.

6.3 Recovery Period and After COVID-19

Respondents reported that, during the recovery period of the pandemic, they envision themselves spending between **3.22** and **4.92** hours per week viewing Creator Content. This range constituted a **1% increase from their reported hours prior to COVID**. This small increase suggests that individuals are likely to **maintain their already robust engagement** with Creator Content platforms, even if the spike they experienced during quarantine months passes.

“ There will be a much greater variety which will come with customization. People will demand more entertainment that they can interact with. As a generation, we get bored of just consuming Netflix. ”

⁴⁰ NBC News
⁴¹ USA Today

⁴² Statista
⁴³ Statista





7. Social Platforms

Social Platforms constitute a unique form of entertainment dedicated primarily to **casual interaction between friends, family, or followers**. These interactions can vary from mass broadcasting to a group of strangers to private calling and messaging using apps such as Zoom or Facebook Messenger for virtual conversations between close acquaintances. These applications are especially relevant during quarantine as they allow their users to **remain connected** to audiences and people that matter to them.

7.1 Prior to COVID-19

Social and communication platforms have garnered **massive growth and influence** over the past ten years, evolving into a versatile environment of tweets, posts, and video chats that have the potential to organize large-scale demonstrations and even warp elections. In 2010, the **number of social media users** was just under **1B** world-wide.⁴⁴ Today, this number is **nearly tripled** at just under **3B**. A Pew Research survey found that **72%** of respondents in the US **use social media daily**, and of the remaining, **14%** use it **several times a week**.⁴⁵

Social Media Penetration Rate⁴⁶



49%
Globally

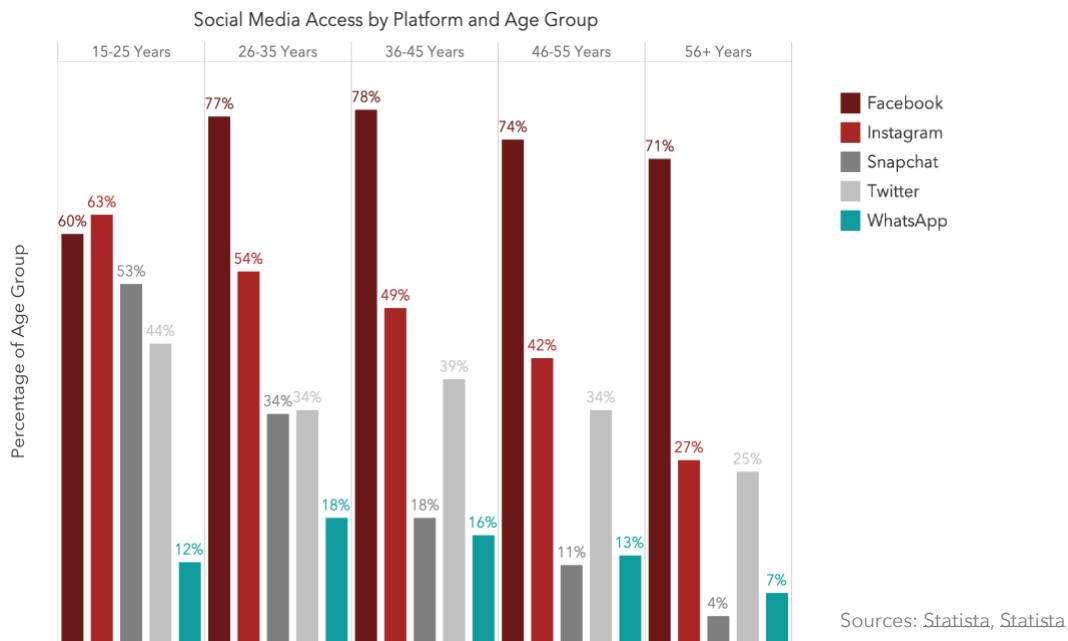


69%
in the U.S.



71%
in East Asia

Exhibit 14. Facebook has traditionally been the most prominent social media platform, boasting around 2.4 billion users.



⁴⁴ Our World in Data

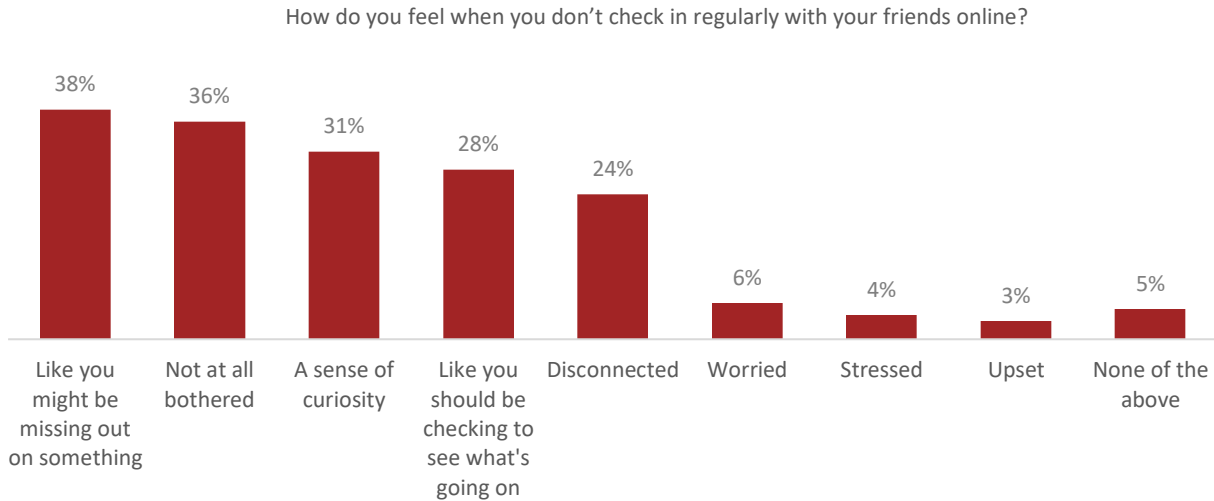
⁴⁵ Statista

⁴⁶ Statista



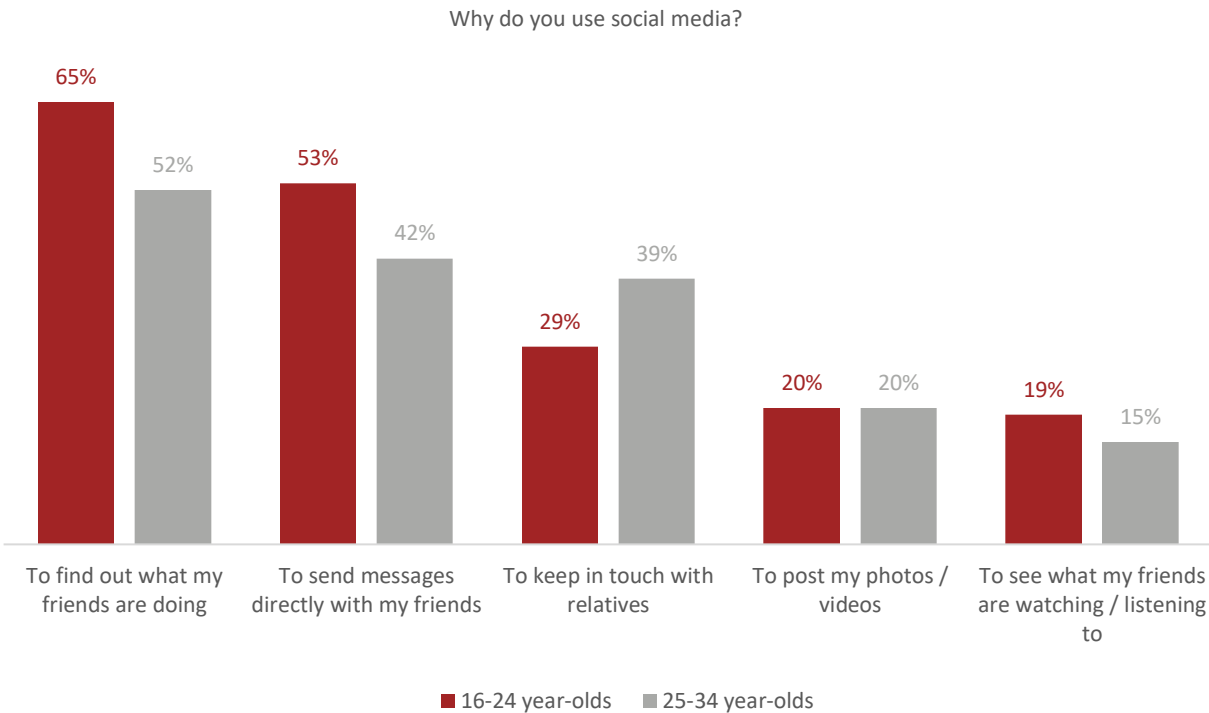


Exhibit 15. A 2014 survey of teenagers aged 15-18 in the United Kingdom revealed that social and communicative entertainment feeds off of a societal fear of being forgotten or losing touch, which the internet aptly refers to as the “fear of missing out (FOMO)”.



Source: Statista

Exhibit 16. A 2015 survey of teenagers between 16-24 and adults 25-34 in the United Kingdom revealed that the most common motivation of social media use was to keep watch over what their friends were doing.



Source: Statista



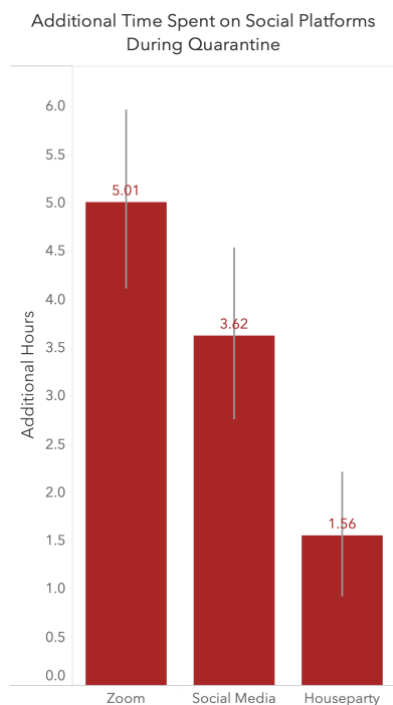


7.2 During Quarantine

Given that social connectivity is a main driver of social media usage, the lack of in-person communication due to quarantine has led to a **noticeable increase in demand for these virtual platforms**.

In a survey recently conducted during lockdown in Hungary, **35%** of respondents revealed that they now spend **significantly more time using a smartphone**, and **29%** visiting social media.⁴⁷ In France, **38%** of respondents specified that a hobby that they enjoyed the most over quarantine was **exchange with relatives over phone or social media**, while independent activities such as physical exercise or craft activity were claimed by only **13%** and **5%** of respondents respectively.⁴⁸ Most convincingly, **72%** of the 2,000 teenagers surveyed in the United Kingdom noted that **face-to-face calls with friends helped them cope during lockdown**.

Ultimately, social platforms serve as a means for **staying socially connected** and healthy in physical isolation and for **providing entertainment** when in-person alternatives are locked-down. Beyond that though, given the increasing influence and reach of these platforms, social media has also been an **important catalyst for social change** in the US and globally, as seen through the recent #metoo and #BlackLivesMatter movements.



Data from HCCG's June 2020 Entertainment Survey indicates that **more personalized forms of staying in touch** virtually, such as FaceTiming or calling friends, are preferred over more general social media usage. The **average hours spent socializing remotely increased by 46%** and **254%** for 1-on-1 and group meetings respectively, compared to an average growth in social media use of only **23%**.

In HCCG's focus groups, one student even explained that she **FaceTime and Zoom-called** her friends every night for **3-5** hours because "that was the only thing keeping [her] sane." When asked about time spent on social media, however, many students associated scrolling through Instagram, Snapchat, or Facebook with "wasting time." One participant suggested the cause of this disparity was that **being with friends "in real time" was far more memorable than seeing their photos online**.

⁴⁷ Statista

⁴⁸ Statista

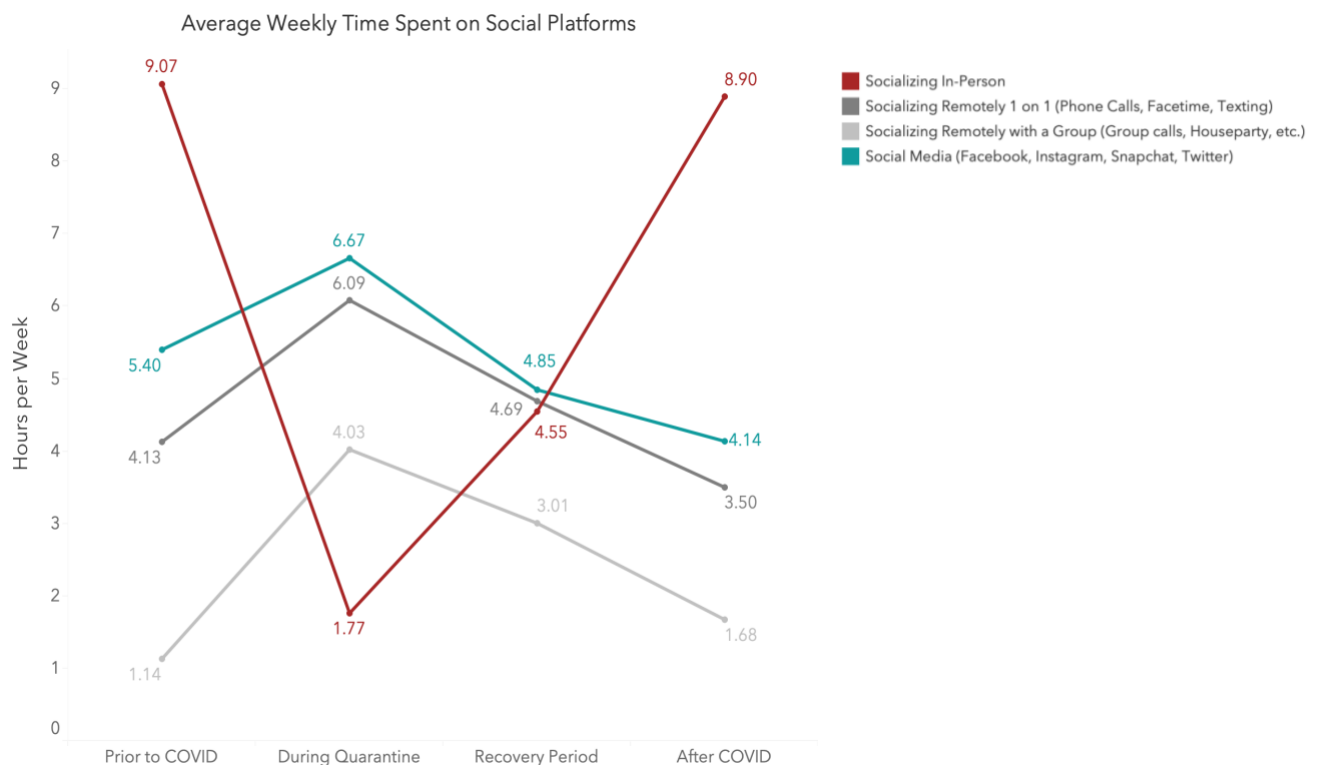


7.3 Recovery Period and After COVID-19

Focus group participants implied that **in-person socialization will pick up again** throughout the recovery period, but the HCCG survey suggests that participation will still remain around **50% lower than pre-COVID levels due to concerns about the virus**. Some students indicated that they would not feel comfortable socializing in large, in-person groups until a vaccine was developed, at which point they believed social trends would normalize again.

Predictions for communication post-COVID reveal that, while **in-person socialization will nearly fully recover**, remote socializing platforms may **still remain relevant in a group context**, as time spent on those platforms is projected to increase by **48%**. Due to the convenience of virtual platforms for large-scale gatherings, people may lose incentive to physically attend larger social events. Multiple focus group participants indicated that they would **likely use Zoom again post-quarantine**, both for international meetups and local ones. One student in particular expressed that she may even prefer using Zoom to cut commute times and costs, indicating that the quarantine may have highlighted many viable and perhaps even preferred alternatives to traditional in-person contact. **This trend does not hold for remote 1-on-1 meetings**, which are predicted to decrease by **15%** compared to pre-COVID levels, implying that there is still **significant value add to meeting in-person on an individual level** compared to on the virtual platforms available today.

Exhibit 17. The HCCG Survey reveals that in-person socialization is likely to rebound nearly completely post-COVID, with positive residual effects for remote group-socialization.





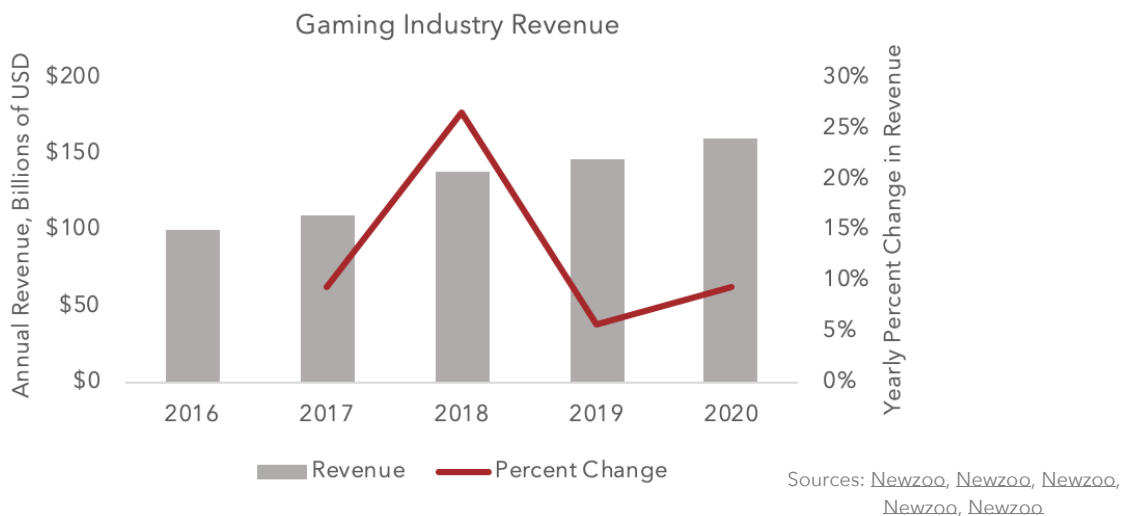
8. Gaming

Gaming is a unique type of entertainment in which players interact with a virtual world, storylines, or other players through a series of challenges or tasks. Some of the most popular games are developed for **personal computers (PCs)** or **gaming consoles** such as the Xbox, PlayStation, or Nintendo Switch. The past decade has also seen an explosion in the popularity of **mobile and multiplayer games**. While some games require an upfront payment to play, others are free-to-play but earn revenue through either ads or microtransactions within the game. This section explores these trends in video games both before and after COVID-19 and predicts how they will continue after the quarantine is lifted.

8.1 Prior to COVID-19

The digital gaming industry is one of the fastest growing forms of entertainment. Since the rise of Atari in the 1970s, PCs and consoles have remained stalwarts of the industry. The video game industry earned **\$152B** in revenue in 2019⁴⁹ and has recently seen an increased emphasis on **mobile games** that give access to a wider consumer base, **free-to-play games** that encourage progression through paid microtransactions, and **multiplayer experiences** that grow quickly due to network effects.

Exhibit 18. The gaming industry has seen steadily increasing YoY revenues in the past 5 years, experiencing the largest growth in 2018.



Mobile games **minimize barriers to entry because of their convenience and low price**. PC and console gaming require hundred or thousand-dollar machines to play games that cost up to \$60 each. In comparison, the majority of mobile gaming-related purchases are under \$1, and **75%** of mobile phone users regularly play mobile games.⁵⁰ Also, while gaming has traditionally been male dominated, **54%** of North American mobile gamers are female.⁵¹

⁴⁹ [Newzoo](#)

⁵⁰ [Statista](#)

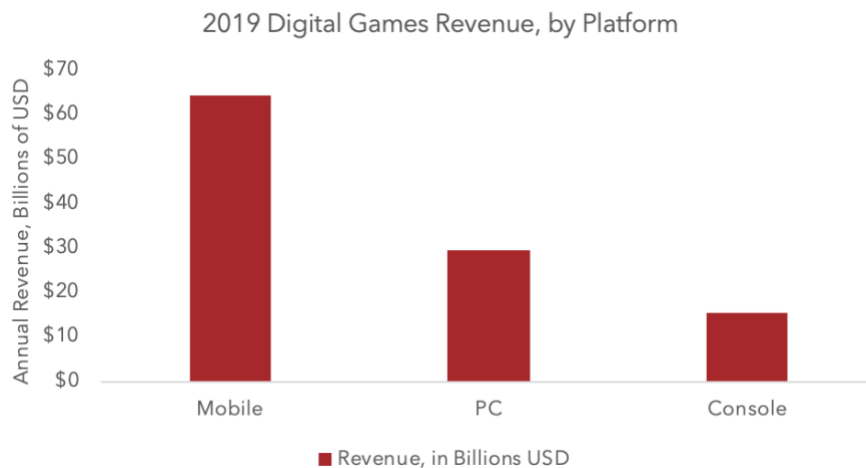
⁵¹ [Statista](#)





Recently, **free-to-play games which generate revenue through in-game microtransactions**, from aesthetic tweaks to upgrades that bypass hours of progress, have also **gained popularity on all platforms**, with a **10%** growth in revenue between 2018 and 2019 in North America.⁵² Free-to-play games generated **\$88B** in revenue in 2018, **more than any other category**, with Fortnite, Candy Crush Saga, and others proving their popularity across platforms. While **98%** of consumers never spend on microtransactions and enjoy the game for free, a small number of “whales” spend large sums of money, with **0.15%** of consumers generating **46%** of the total revenue.⁵³

Exhibit 19. Mobile games dominate the industry in revenue compared to paid console and PC games.



The rise of multiplayer games echoes consumers’ desire to connect with others online. One focus group participant described using gaming as a means to “connect with friends.” Coupled with the rise of the free-to-play model, games such as Valorant and Apex Legends have seen an explosion of success in both revenue and user growth. **56%** of gamers reported **playing online multiplayer games at least once per week**.⁵⁴

8.2 During Quarantine

While COVID-19 has hurt the economy as a whole, the extra time spent at home and online has **boosted the video-game industry**. Both mobile and PC gaming have experienced a healthy jump: mobile game downloads were up **35%** in March compared to January 2020 ⁵⁵, and video-game distributor Steam has seen a **44%** jump in users from September 2019 to March 2020 to a record **20M**.⁵⁶

The COVID-19 crisis has **amplified trends** that were present even before quarantine. Xbox One and PlayStation 4 sales have dwindled as consumers anticipate the release of the Xbox Series X and PlayStation 5. Furthermore, sports leagues such as Formula 1 and the NBA have

⁵² Statista

⁵³ Forbes

⁵⁴ TechJury

⁵⁵ Statista

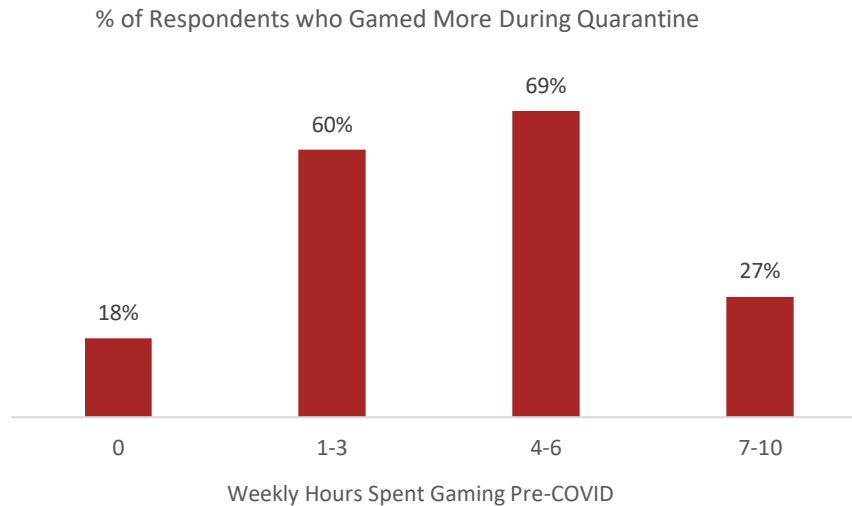
⁵⁶ PCGamesN





held online gaming tournaments simulating their respective sports, where professional athletes competed and interacted with fans.⁵⁷ One focus group respondent also explained that quarantine **“pushed me to get games I wouldn’t have otherwise gotten”** in order to **better connect with his friends** through their shared enjoyment of gaming.

Exhibit 20. Moderate gamers saw the biggest increase in time spent gaming during quarantine.



8.3 Recovery Period

The recovery period will likely entice casual gamers to spend their time doing other activities but have **little to no effect on more serious gamers**. **33%** of those surveyed reported spending at least one hour per week playing video games during quarantine. **59%** of respondents anticipate **spending less time gaming during the recovery period**, with some focus group participants predicting an overwhelming surge of participation in in-person events after quarantine. This pattern is **especially prominent in female gamers** (**64%** of females, **55%** of males).

One potential reason for spending less time gaming is due to other activities of non-quarantined life. Some had attributed their sudden increases in time spent gaming to having **“larger chunks of free time”** to invest in games they might not have otherwise started. These effects combined caused gamers to predict overall a **31% decrease in time spent gaming during the recovery period**. However, the other **41%** of gamers believe they will spend **at least as much time gaming after quarantine**. These respondents were **disproportionately serious gamers**: **25%** reported spending at least seven hours per week gaming before COVID-19, compared to **14%** of all gamers. However, **34%** did not play video games regularly before quarantine, indicating that **the time at home has enticed them into gaming**.

⁵⁷ [The Washington Post](#)

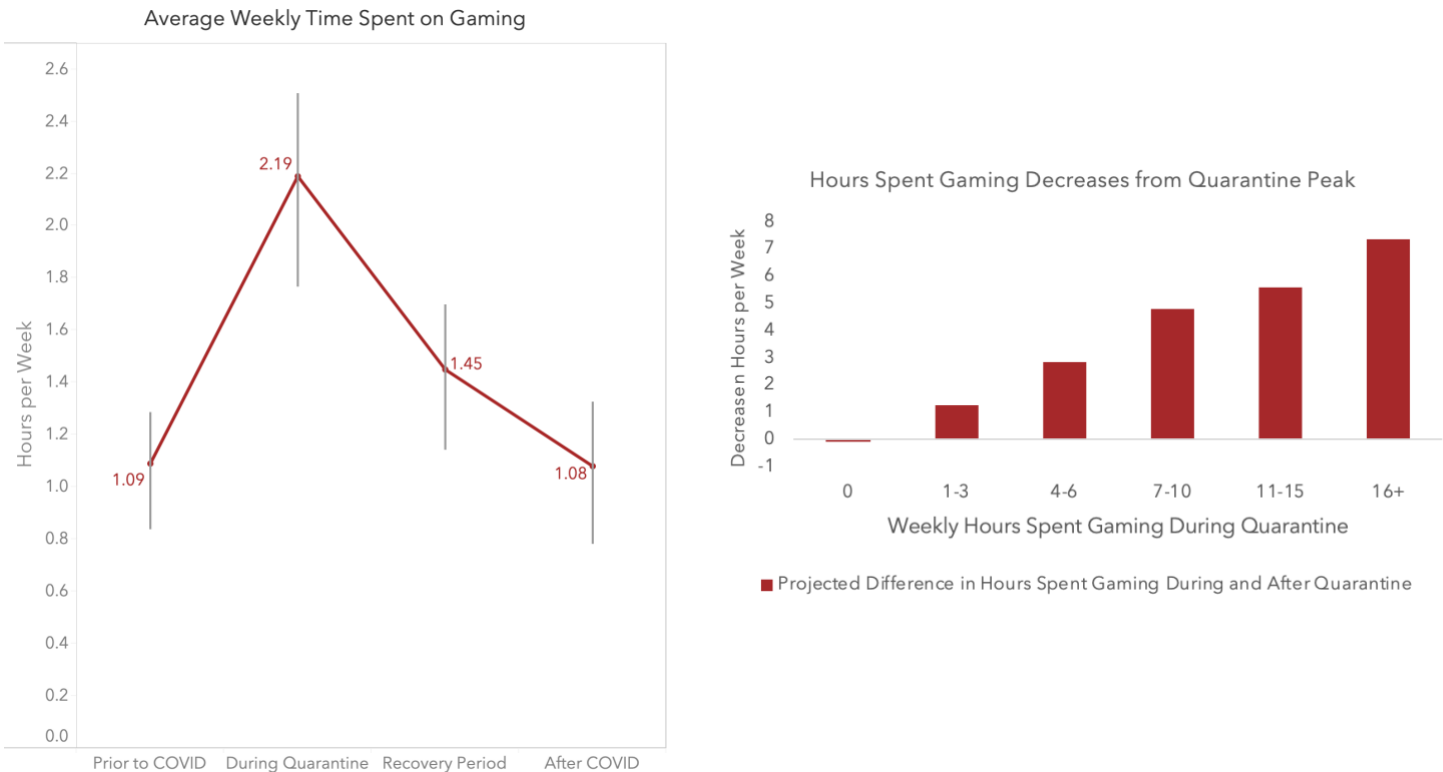


8.4 After COVID-19

In many ways, **gamers seem to anticipate a return to the status quo**, indicating a **2.5% overall increase in time spent gaming** after quarantine compared to their pre-COVID habits. Many of the effects that influenced gaming habits hold few long-term implications. One focus group participant justified **temporarily spending more money on games**, stating he feels “a lot less guilty” since he is no longer spending as much on food or other activities. As **consumption in other areas decreased**, gamers felt more empowered to spend on their entertainment option of choice. Furthermore, other short-term solutions, such as sports leagues using gaming as a stopgap for their postponed seasons, are likely to **diminish after quarantine**.

While the pandemic has increased demand for the video game products, it has caused both short-term and long-term **harm to supply chains**. When the Switch’s population rose in March, Nintendo struggled to keep up as factories suffered from social distancing measures. Indeed, the much-anticipated releases of the PlayStation 5 and Xbox Series X could be delayed from their estimated release dates in Q4 2020 due to many **factories operating at less than half capacity** during March.⁵⁸

Exhibit 21. Based on the HCCG survey, Gaming saw a spike during quarantine due to a decline in participation for in-person entertainment options, but it is likely to revert back to pre-COVID levels post-quarantine.



⁵⁸ [The Washington Post](#)



9. Generational Differences

The HCCG survey also noted some generational differences between those **under the age of 25 (Gen-Z)** and those who were **25 and above (non Gen-Z)**. However, most of the participants were Harvard affiliates that could be contacted through mailing lists, so it is possible that even those in the 25-54 age category skewed towards the younger end of the range.

Exhibit 22. In general, non Gen-Z users spend more time on traditional TV, books, audiobooks / podcasts, and digital news / articles, while Gen-Z users spent more time socializing and using social media.

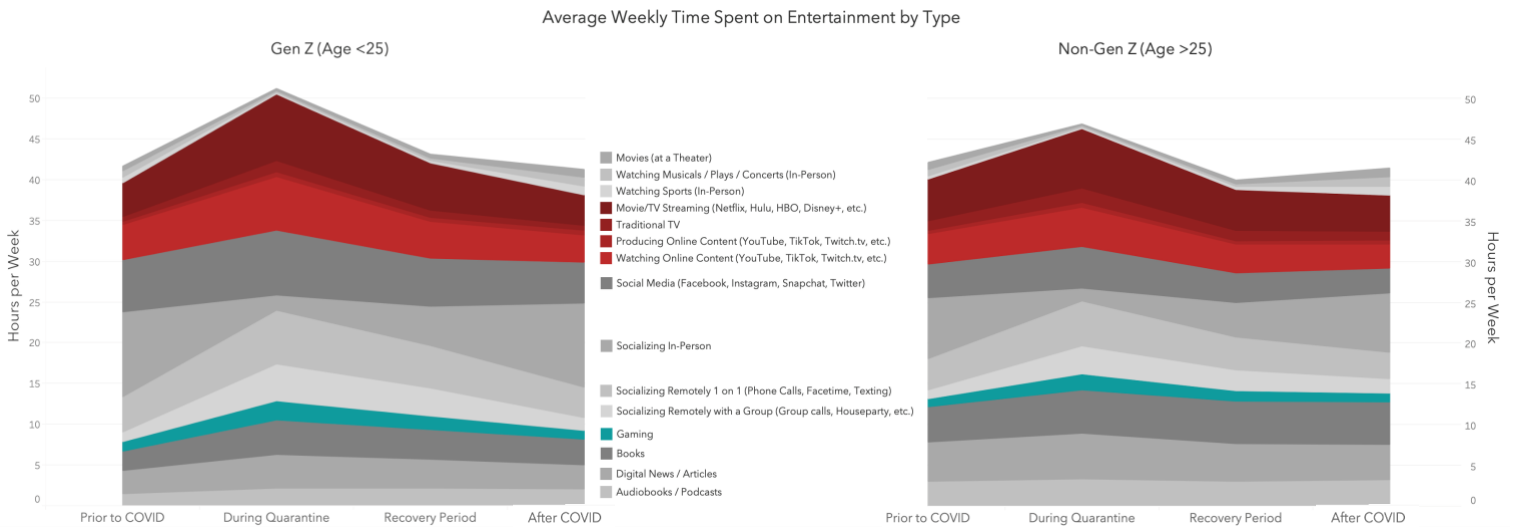


Exhibit 23. In terms of content, non Gen-Z users preferred historical, political, and documentary series slightly more than Gen-Z viewers, who preferred more romance and comedy.

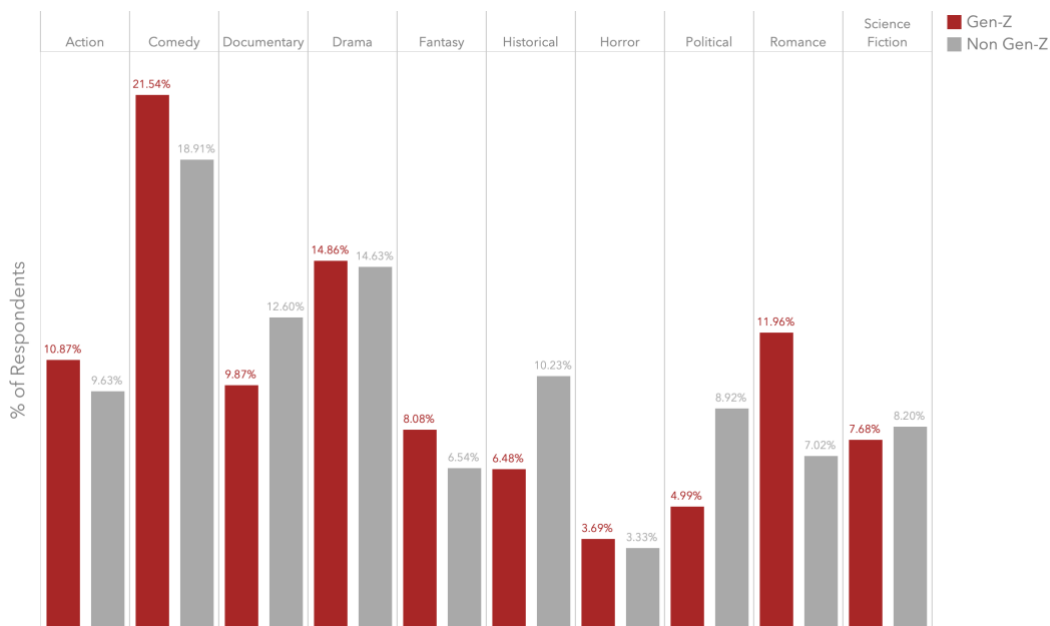


Exhibit 24. Gen-Z consumers were more likely to be “extremely satisfied” pre-COVID. As a result of the quarantine, the % of respondents who were “extremely satisfied” decreased by more percentage points for Gen-Z consumers than non Gen-Z consumers, though average satisfaction decreased across the board.

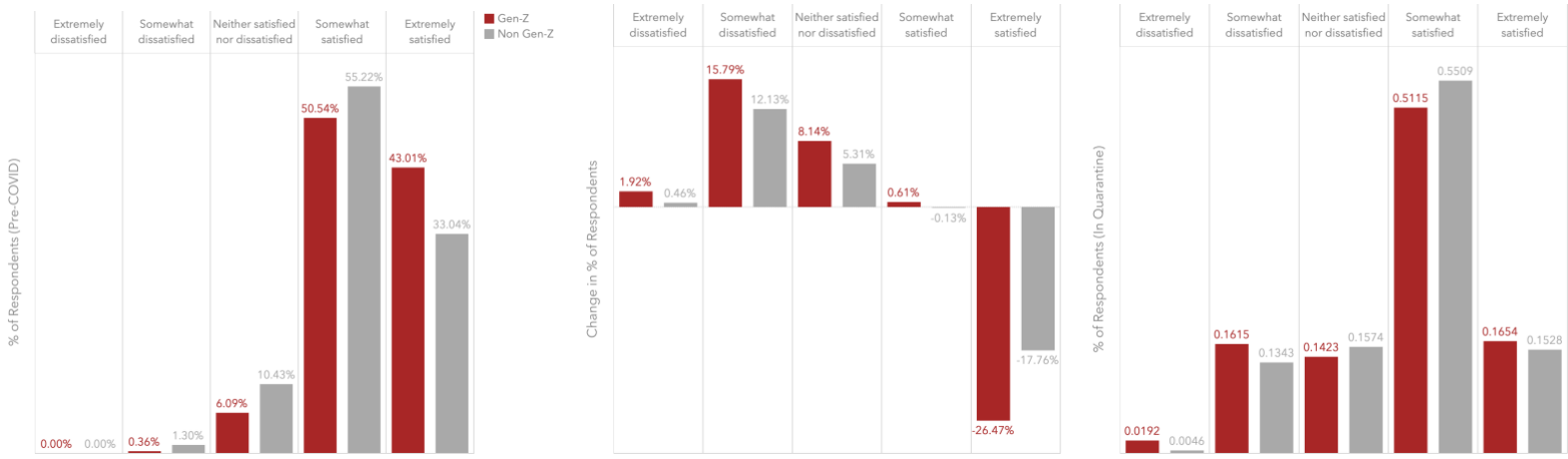
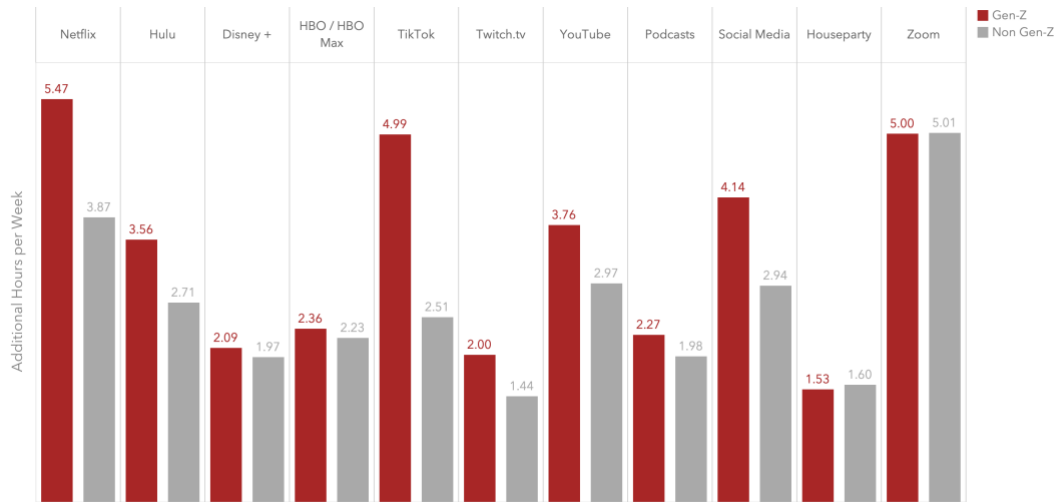


Exhibit 25. A graph of the additional hours spent on various platforms per week during quarantine compared to pre-COVID reveals that Gen-Z consumers spent significantly more additional time on platforms like Netflix and TikTok compared to non Gen-Z respondents.



10. Conclusion

Due to the closure of in-person entertainment options, many virtual alternatives such as Streamed Content, Social Platforms, Creator Content, and Gaming, **saw a boom during quarantine**. In the recovery period, surveyed participants indicated varying levels of willingness to return to these Live Events, indicating a **slow and uneven recovery**. However, once the virus dies down or a vaccine is discovered, people are **anticipating a boom in Live Entertainment** options to compensate for the missed time, and many of the **virtual options will see a draw-down in usage** as a result.



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