AnalyticsIQ

RESEARCH REPORT

ESports Behavior
Department of Cognitive Sciences

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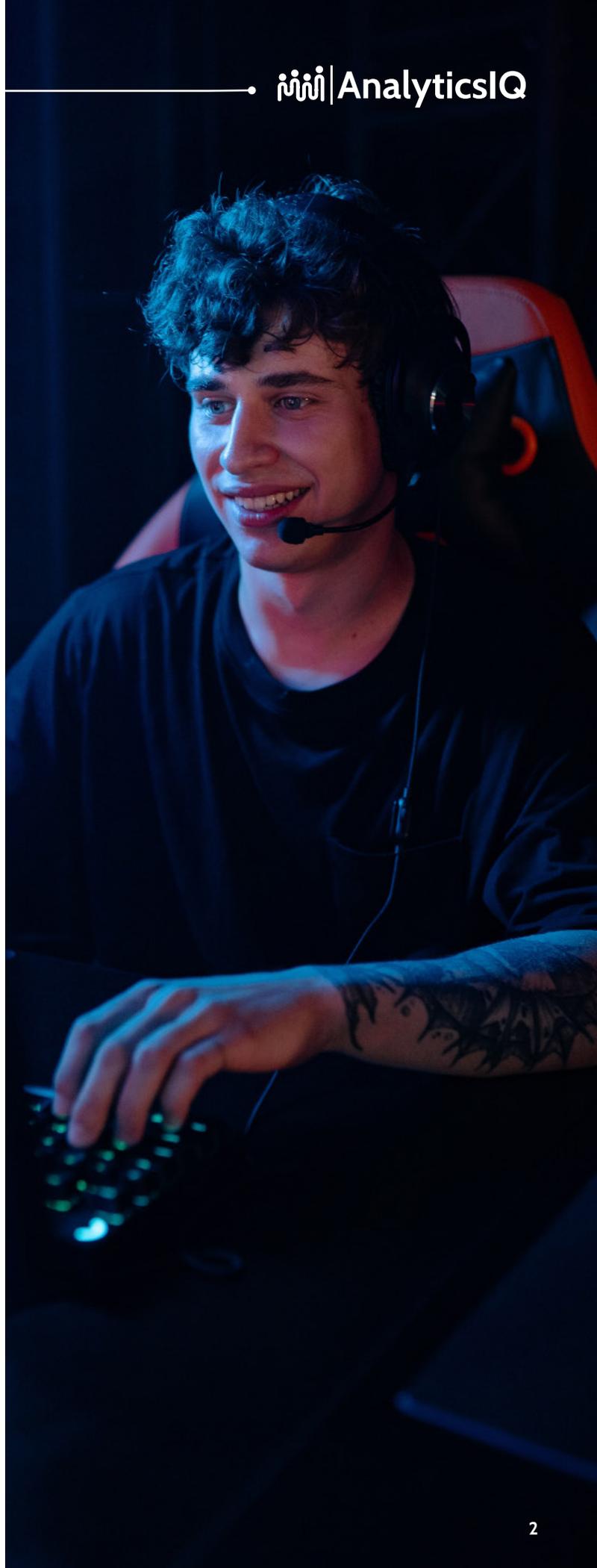
INTRODUCTION

Esports, or competitive video game play tournaments, have been steadily gaining popularity in recent years[1]. The first esports event, Spacewar, was held as far back as 1972 and hosted by Stanford University's Artificial Intelligence Laboratory for an audience of just a few dozen people[2]. Today, esports tournaments attract global audiences well into the millions, with peak viewership of over 2 million in May of 2023 for popular games like League of Legends[3]. These tournaments can have massive prize pools for winning players or teams, the highest being the game Dota 2 with over $9M in May of 2023[3]. According to a 2023 report by Nerdstreet, there are over 20 major esports tournaments held or scheduled in 2023 and are expected to draw large audiences[4]. Much like classic sporting events, esports are often organized into competitive tournaments that can be played by individuals or teams and can be viewed in-person but are more frequently viewed online[1]. In contrast, the games played in these events can shift rapidly based on the popularity of the video game itself[3].

Due to its growing popularity, esports is now regularly associated with celebrities both within the esports world and out. The highest earning esports player in the United States is Kyle "Bugha" Giersdorf, who has won more than $3M participating in esports tournaments[5]. These events are also associated with celebrities outside of the gaming world. For example, in the 2022 League of Legends World Championship, American music artist Lil Nas X created music and virtual content for the game and tournament[6]. Celebrities have also invested in and purchased esports teams, including music artist Drake investing in the popular esports team 100 Thieves[7], athlete Michael Jordan investing in AXiomatic Gaming (which owns Team Liquid)[8], and actor Michael B. Jordan investing in Andbox, the ownership group behind the Overwatch and Call of Duty gaming leagues[6].

With this growing potential market, it is important to understand the behavior around watching and playing esports.

[1] Werder, K. Esport. Bus Inf Syst Eng 64, 393–399 (2022). https://doi.org/10.1007/s12599-022-00748-w

[2] Brand, S. (1072, September 19). S P A C E W A R. SPACEWAR - by Stewart Brand - Fanatic Life and Symbolic Death Among the Computer Bums. https://www.wheels.org/spacewar/stone/rolling_stone.html

[3] escharts. Most Popular Esports Games 2023 | Esports Charts, escharts.com/top-games. Accessed 7 July 2023.

[4] Bencomo, B. (n.d.). Biggest Esports tournaments of 2023. Nerd Street. https://nerdstreet.com/news/2023/1/esports-tournaments-events-calendar-2023

[5] United States Esports Results & Statistics. Esports Earnings. (n.d.). https://www.esportsearnings.com/countries/us

[6] Esguerra, T. (2022, September 15). Lil Nas X teaming up with riot for 2022 league worlds theme, Prestige K'sante Skin, and more. Dot Esports. https://dotesports.com/league-of-legends/news/lil-nas-x-teaming-up-with-riot-for-2022-league-worlds-theme-prestige-ksante-skin-and-more

[7] Duran, H. B. (2021, September 29). A guide to: Celebrities in esports – music, film, and TV - Esports Insider. Esportsinsider. https://esportsinsider.com/2021/09/celebrities-esports-music-film-tv

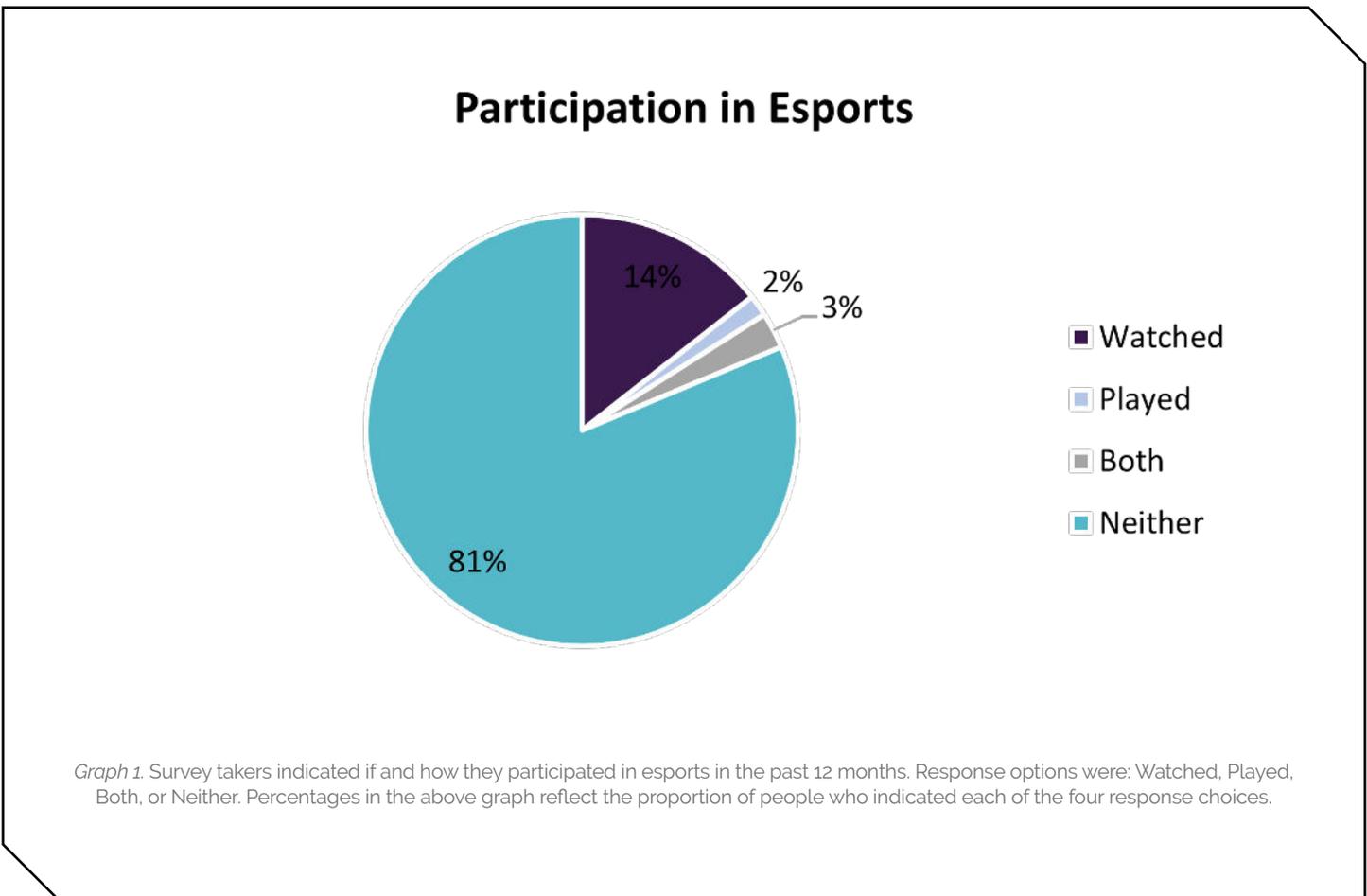[8] Chiari, M. (2018, October 25). Michael Jordan leading $26 million investment in Esports group axiomatic gaming. Bleacher Report. https://bleacherreport.com/articles/2802782-michael-jordan-leading-26-million-investment-in-esports-group-axiomatic-gaming

METHODS AND PARTICIPANTS

In April of 2023, a large, random, representative sample of the US population was queried by the Cognitive Sciences research team at AnalyticsIQ to assess behavior trends and motivations around esports. These data were collected via a voluntary online survey, and all participants were compensated for their time.
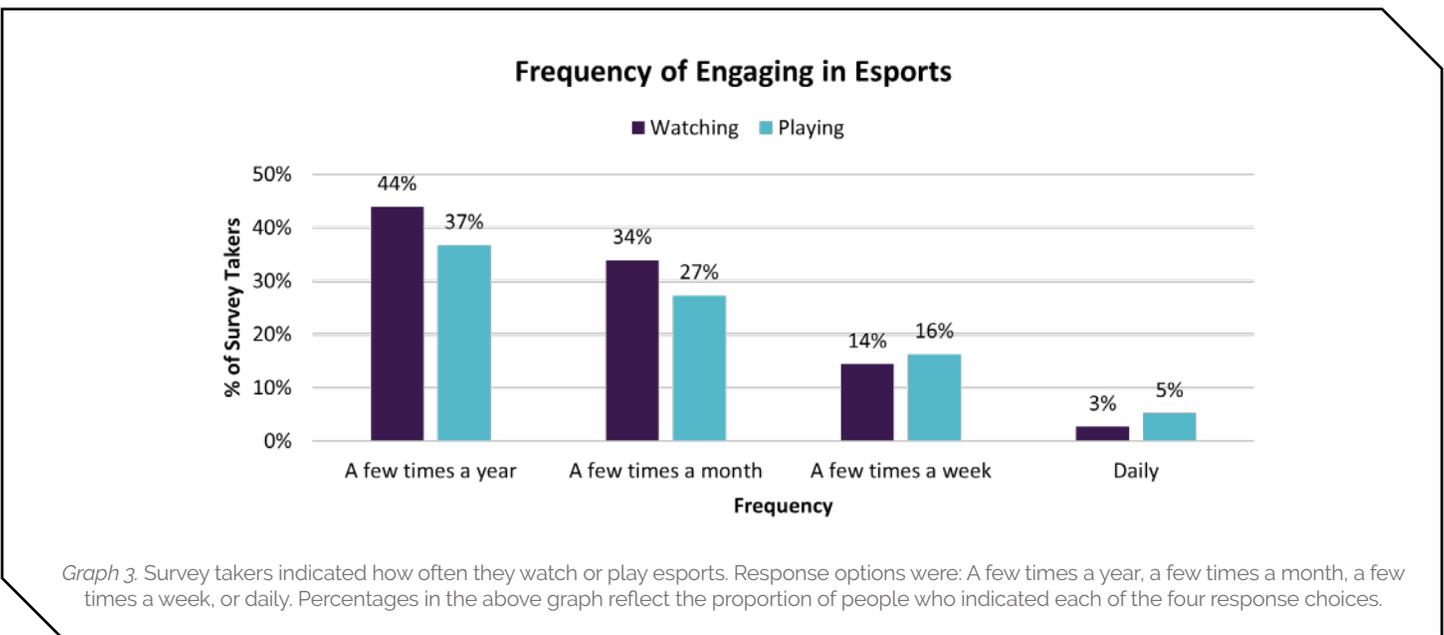
Survey respondents who agreed to the informed consent were asked demographic information (e.g., age, race, gender, education, income) before responding to questions regarding their behavior around esports. The esports topics included: esports watching behavior (e.g., frequency, games, platforms, motivations), participation in esports (e.g., frequency, games, tournament styles, motivations), and betting behavior related to esports.

The majority of respondents (81%) did not report watching or playing esports. However, the remaining 19% indicated that they participated in esports in some way (e.g., watching, playing, both) and will be the focus of the remainder of this report. See Graph 1.

Participation in Esports

14%   2%
         3%

81%

■ Watched
■ Played
■ Both
■ Neither

Graph 1. Survey takers indicated if and how they participated in esports in the past 12 months. Response options were: Watched, Played, Both, or Neither. Percentages in the above graph reflect the proportion of people who indicated each of the four response choices.

PRIMARY FINDINGS:

Less than a fifth of survey respondents (19%) reported some type of engagement with esports, be that watching (17%), playing (4%), or a co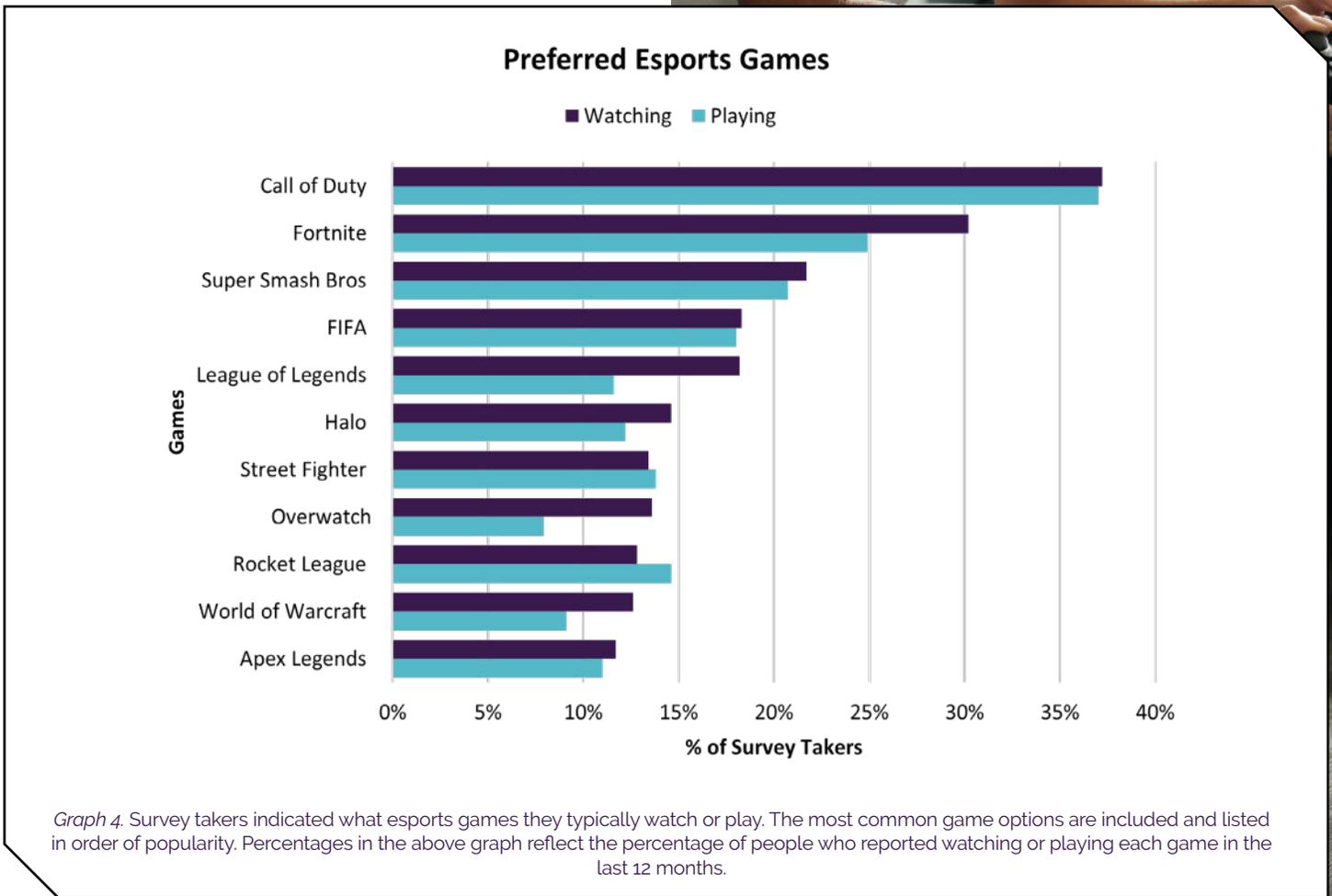mbination of the two. These esports enthusiasts were majority male (60%), in the millennial (48%) or Gen X (27%) age groups, college educated (69%), and largely white/ Caucasian (61%). Those who reported playing in esports tournaments said they typically play 1-5 hours at a time and equally prefer playing solo or on a team (40%). Only 28% said they prefer to play single-player games. The primary motivations for both watching and playing esports were similar. Entertainment and passing the time were the top two motivations for both groups, followed by socialization and personal skill building. See Graph 2. Additionally, the data from the current survey show that the majority of esports behavior, both watching and playing, occurs a few times a month to a few times a year. See Graph 3.

Esports Motivations

■ Watching ■ Playing

Motivation	Watching	Playing
Entertainment	73%	65%
Pass the Time	47%	44%
Socialization	22%	36%
Personal Skill Building	16%	28%
Betting	6%	16%
Charity	4%	9%

% of Survey Takers

Graph 2. Survey takers indicated their primary motivations for watching & playing esports. Response options were: Entertainment, Pass the Time, Socialization, Personal Skill Building, Betting, and Charity. Percentages in the above graph reflect the proportion of people who indicated each of the six response choices.

Frequency of Engaging in Esports

■ Watching ■ Playing

Frequency	Watching	Playing
A few times a year	44%	37%
A few times a month	34%	27%
A few times a week	14%	16%
Daily	3%	5%

% of Survey Takers

Graph 3. Survey takers indicated how often they watch or play esports. Response options were: A few times a year, a few times a month, a few times a week, or daily. Percentages in the above graph reflect the proportion of people who indicated each of the four response choices.
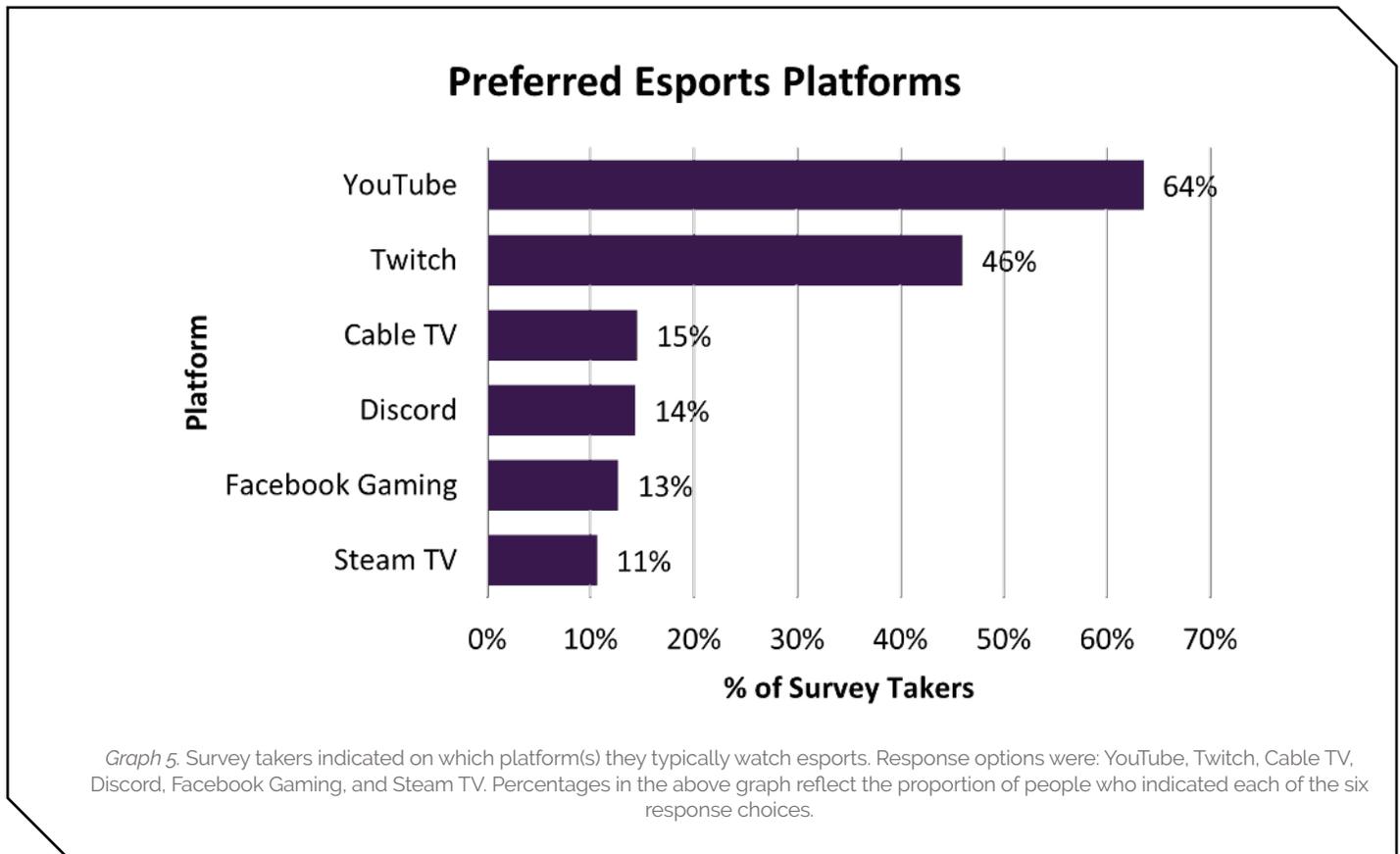
PREFERRED GAMES

At the time of survey, the most popular game reported by both watchers and players was the Call of Duty game series (37%), followed by Fortnite, Super Smash Bros, and FIFA. See Graph 4. Coincidentally, shortly before these data were collected, Seasons 2 of Call of Duty: Modern Warfare II and Call of Duty: Warzone 2.0 were released, which could be related to the popularity in our sample[9]. Given that the popularity of game titles played in esports varies dramatically over time, we speculate that this is partially due to the release cycle of new games.

Preferred Esports Games

■ Watching ■ Playing

Graph 4. Survey takers indicated what esports games they typically watch or play. The most common game options are included and listed in order of popularity. Percentages in the above graph reflect the percentage of people who reported watching or playing each game in the last 12 months.

[9] Staff, C. of D. (n.d.). Modern Warfare® II and CALL OF DUTY®: WarzoneTM 2.0 season 02 reloaded: Himmelmatt Expo, raid episode 02, and more, launching March 15. Call of Duty®. https://www.callofduty.com/blog/2023/03/call-of-duty-modern-warfare-II-warzone-2-0-season-02-reloaded-himmelmatt-raid-overview

PREFERRED PLATFORM

With the increase in online viewership of esports events, new platforms, such as Twitch, have emerged, and familiar platforms have begun to showcase esports events in their regular line-up[10]. At the time of survey, the most popular platforms to watch esports were YouTube and the Twitch streaming platform. See Graph 5. These platforms are two of the largest available for esports viewing; with Twitch being one of the first platforms dedicated to gaming and YouTube creating a specialized live gaming subsection of the platform called YouTube Gaming[11].

Preferred Esports Platforms

Platform	% of Survey Takers
YouTube	64%
Twitch	46%
Cable TV	15%
Discord	14%
Facebook Gaming	13%
Steam TV	11%

Graph 5. Survey takers indicated on which platform(s) they typically watch esports. Response options were: YouTube, Twitch, Cable TV, Discord, Facebook Gaming, and Steam TV. Percentages in the above graph reflect the proportion of people who indicated each of the six response choices.

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[10] All video game streaming sites & platforms. Esports Charts. (n.d.-b). https://escharts.com/platforms

[11] Esports Live Stream Guide: How to watch esports online 2023. Esport Bet. (2022, December 22). https://esportbet.com/live-streaming/

BETTING

Placing bets on esports games and tournaments is as prevalent here as with other sports genres. A recent report by esports.net found that esports fans are gambling with actual currency, virtual currencies such as crypto currencies (e.g., bitcoin), and even with in-game items (e.g., access to characters or aesthetic changes)[12]. Moreover, there are several types of bets that a person can place: betting on players, betting on oneself, making pooled bets, as well as smaller social bets similar to fantasy sports leagues[12]. Larger sports betting organizations such as Draft Kings have started offering esports betting options on popular games such as League of Legends and Counterstrike[13]. Among our esports sample, only 12% of respondents said they had bet on an esports game in the last two years. These respondents were majority male (63%), millennial (53%), had a college education (74%), and self-reported as white/Caucasian (61%). The most common bets tended to range from $1 up to $2,000 with the average bet around $188, and the average winning around $284.

[12] ESPORTS.net. (n.d.). Esports betting 2023 » learn how to bet on Esport & Win. Esports Betting: How to Bet on Esports in 2023. https://www.esports.net/betting/

[13] DraftKings. (n.d.). DraftKings sportsbook. DraftKings Sportsbook. https://sportsbook.draftkings.com/sports/esports

Unplanned, post hoc analyses revealed several unexpected predictive relationships. First, we found significant, positive relationships between financial risk tolerance[14] and esports game play, as well as betting behavior, such that respondents with a higher tolerance for financial risks were not only more likely to have played esports in the last 12 months[15] but they were also more likely to have bet on esports events in the last 12 months[16]. Second, a negative relationship between impulse control[17] and esports betting emerged, whereby respondents with less ability to control their impulses were significantly more likely to have bet on esports events in the last 12 months[18].

[14] Financial risk tolerance was measured using the Financial Risk Attitude Questionnaire; Metzger, B.A., & Fehr, R.R. (2018). Measuring financial risk attitude: How to apply both regulatory and scientific criteria to ensure suitability. Journal of Behavioral Finance, Vol 19(2), 221-234. Doi: https://dx.doi.org/10.1080/15427560.2017.1376331

[15] The logistic regression model was statistically significant, X^2 (N = 8495) = 135.73, p < .001, McFadden R2 = 5.01%

[16] The logistic regression model was statistically significant, X^2 (N = 1582) = 52.78, p < .001, McFadden R2 = 5.13%

[17] Impulse control was measured using the Executive Personal Finance Scale: Impulsivity subscale; Spinella, M., Yang, B. & Lester, D, (2007). Development of the Executive Personal Finance Scale. International Journal of Neuroscience, Vol 117(3), 301-313. DOI: https://doi.org/10.1080/00207450500534043

[18] The logistic regression model was statistically significant, X^2 (N = 1582) = 28.13, p < .001, McFadden R2 = 2.41%

SUMMARY

The purpose of this research was to explore common trends and potential predictors around esports engagement behavior. Based on the data we report here, we conclude the following:

- The majority of those who currently watch or play esports are White/Caucasian millennials with some postsecondary education. Gender was split 60% male, 40% female.

- Esports playing and watching behavior most commonly occurs on a yearly (and sometimes monthly) basis.

- The most popular platforms to watch esports are YouTube and Twitch.

- The most popular game at the time of this survey was Call of Duty. However, based on market trends, we have reason to believe the popularity of games changes dramatically over time.

- Both watchers and players of esports games engage in gambling behavior, however, actual monetary wins tend to be small to moderate.

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FUTURE DIRECTION

As we look to the future of this research (and of esports generally), several directions for further study seem paramount. First, would be to examine the most effective brands (e.g., video games, other electronics, food, clothing, etc.) to market around esports and marketing methods within the esports microcosm. A wide range of companies have sponsored esports teams and tournaments (Red Bull, T-Mobile, Audi, etc.)[19] and it would be helpful to understand the consumer perspectives around the association of these brands with esports. Second, future research could evaluate consumer perceptions of celebrity engagement with esports platforms (e.g., perceived changes in the value or appeal of platforms with celebrity investments). Finally, it may be beneficial to assess the effectiveness of broadcasting esports content across various social media platforms (e.g., Twitch, YouTube Gaming, Facebook Gaming, etc.) to inform not only the most popular platform, but the functionality within the platform(s) that make them popular. All of these directions could benefit companies and stakeholders interested in marketing within the esports genre.

For more information on these research insights or to inquire about conducting a custom research project of your own, reach out to **sales@analyticsiq.com.**

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[19] Meola, A. (2023, January 18). Top esports sponsors & gaming sponsorships. Insider Intelligence. https://www.insiderintelligence.com/insights/top-esports-sponsors-gaming-sponsorships/

ABOUT THE AUTHORS

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