

Detailed Sample & Methodology Sheet - ADL

Hate, Harassment, and Pro-Social Behavior in Online Gaming 2020

Recruitment

Sampling: Respondents (n=814) were recruited to be representative of gamers aged 18-45 in the US online population. Respondents were selected according to age, gender, income, education, and region. The age range of 18-45 was defined in order to offer a concentrated sample within the age range with the largest concentration of gamers. People below the age of 18 were excluded from the sample due to the sensitive nature of some of the topics addressed.

Over-sampling (n=195): Respondents identifying as LGBTQ+, Jewish, Muslim, African American & Hispanic / Latino were deliberately oversampled to ensure the base group was large enough to accurately look within and compare these groups. The final total sample was then weighted to the US gamer population aged 18-45, so the oversampled respondents from minority groups were not over-represented in the final dataset.

Study Specifications

Target population: US gamer population aged 18-45.

Sample size: 1,009 "invitation-only" respondents in the US.

Key interest groups: African American (n=154), Hispanic / Latino (n=134), Asian / South Asian American (n=142), Jewish (n=100), Muslim (n=71), LGBTQ+ (n=146) and ability status (n=332).

Recruitment method: Computer Assisted Web Interviewing.

Accuracy: Estimated margin of error of +/- 2%-3%, with 95% confidence interval when using the full sample.

Dates for fieldwork: July $1^{st} - 16^{th} 2020$.

Fieldwork framework: The survey was conducted by Newzoo in cooperation with Dynata. <u>Dynata</u> is a global leader in first-party data. The sample was recruited through Newzoo's Global Gaming & Esports Panel powered by Dynata. With 50M+ members from 45 markets including the US, the largest panel of game enthusiast in the world. Panelists are pre-profiled on their game and esports



behavior and interest, enabling Newzoo to directly interview the relevant target groups. In the case of ADL's study being gamers.

Data Quality

Detailed overview of the weighting proses

Step 1 – Establish a Nationally Representative Sample

We recruited 814 respondents to be representative the US Gamer Population aged 18-45 on a national level (according to age, gender, income, education, and region). The sample was then validated by comparing it to census data, ITU numbers (internet penetration), and Newzoo's Consumer Insights Data on gaming behavior in the US. This data, along with the census data available, gave us insight into the demographic distribution of what the minority group variables (ethnicity, religion, sexual orientation, and ability status) should look like in the final dataset.

Step 2 – Over sample on key interest groups

We then oversampled on key interest groups, including Jewish, Muslim, LGBTQ+, Black / African American, and Hispanic / Latino, to ensure we had enough respondents belonging to these minority groups to be able to examine responses within these groups during analysis.

Step 3 – Weight data to account for oversampling

The final dataset (including the over-sampled population, n=1,009) was then weighed, so that the demographic distribution of our final dataset matched the demographic distribution of our initial gamer sample. This involved re-applying weights based on four variables - age, gender, ethnicity, religion, sexual orientation and ability stats using a rake algorithm* to give each respondent a weight. Newzoo combined data from the UN Census, International Telecommunication Union (ITU), Newzoo's Consumer Insights Data Base, US Census Bureau, the Pew Research Center, and CDC.

* Rake or raking (sometimes called iterative proportional fitting) is the most prevalent method for weighting survey data. A useful overview of research weights: <u>http://www.nyu.edu/classes/jackson/design.of.social.research/Readings/Johnson%20-</u>%20Introduction%20to%20survey%20weights%20%28PRI%20version%29.pdf

A good academic article comparing different ways to weigh data:

http://www.sverigeisiffror.scb.se/contentassets/ca21efb41fee47d293bbee5bf7be7fb3/weighting-methods.pdf



Step 4 - Clean and validate weights

It's important when weighing data to not give one respondent a weight that is too high (as this would result in the data relying too much on a single individual's response) or too low (which would result in the data basically ignoring that individual's response). Therefore, weights were trimmed to a min=0.3 and a max=3 (industry standard).

Finally, key gaming behavior metrics were then compared again with secondary data sources, to ensure that the weighted sample was still representative of the U.S. Gamer population aged 18-45, and that the gaming behavior observed was consistent with Newzoo's Consumer Insights Research.

Data cleaning

Data is cleaned according to the following factors. Approximately 5% of total responses were removed from the sample.

Time: Respondents who complete the survey too fast or too slow get filtered out (separate brackets were used for Online multiplayer & non-multiplayer gamers). Times are based on standard deviation (distance from the average time).

Repetitive / flatlining responses (Grid validation): When respondents answer questions without reading. This is usually expressed by consistently answering the same options as presented in the survey.

Inconsistent and incoherent answers: Often expressed by providing responses that strongly mismatch with earlier answering, or by answering clearly answering open text responses in a nonsensical way.

Final checks

Before publication of any extrapolated data, Newzoo also performed several quality checks:

Validation questions: The survey included several questions comparable to topics that can be found in Newzoo's own Consumer Insights Research e.g., gaming behavior & Games / Franchises played.