## Children's Online User Ages 2023 Quantitative Research Study

Technical Report

## Introduction

## Background and objectives

Ofcom's ethnographic research into the 'Risk factors that may lead children to harm online' found one of the key risk factors were children bypassing age assurance measures in social media apps/sites. For example, by using a false date of birth to gain access to online platforms and the content within, while under the minimum age requirement for that platform (usually the age of 13 ).

To understand the extent to which children are bypassing age assurance measures, Ofcom commissioned YouGov to conduct quantitative research to estimate the proportion of children that have their own profiles on social media apps/sites with 'user ages' that make them appear to be older than they actually are.

Social media profiles with user ages of $16+$ and $18+$ are the point at which some apps/sites grant access to certain features and functionalities to their users. This can include the ability to use direct messaging and the ability to see adult content. Therefore, the research reports on:

- Those aged between 8 and 12 with an online user age of at least 13;
- Those aged 15 or younger with a user age of at least 16 ;
- Those aged 17 or younger with a user age of at least 18 .

The research focused on ten apps/sites, which were the most used among children aged 8-17 in various Ofcom research studies.

The research reports on:

- Children's user ages at an overall level and by app/site;
- Usage of each app/site among each age group (8-12s, 13-15s, 16-17s);
- Profile ownership on these apps/sites, i.e., whether respondents had their own profile or used someone else's, by each age group;
- Whether respondents changed the date of birth since the setting up of the profile;
- Whether respondents were required to complete any age verification processes;
- If so, what age verification methods and tools they used.

Prior to the 2023 survey, a pilot survey was undertaken in July 2022 to assess children's user ages at that time. As a result of conducting the survey in 2022 and reflecting on the caveats and findings from the study, changes were made to the 2023 survey questionnaire. A summary of the changes is included in the chart pack which can be found here.

## Summary of approach

YouGov is a professional research and consulting organisation, focussed on collecting high quality, in-depth data for market research and has extensive experience of youth, television and radio broadcasting sectors, as well as on-demand services, policy research.

Our approach to conducting this study and the final deliverables were as follows:

- To build on previous work of similar focus (Children's Online User Ages 2022);
- To estimate the proportion of children with a social media profile that is older than their actual age;
- To conduct an online survey with a sample of at least 1,500 (50 per age group per app/site) young people aged 8 to 17 in the UK, recruited via the YouGov panel; and
- To provide summary data tables, SPSS/ CSV data files, and a chart pack report for publication.


## Questionnaire design

## 2023 survey

The questionnaire for the children's user age research was designed by Ofcom - using the 2022 questionnaire as a foundation - and reviewed by YouGov to ensure the questions would translate successfully online. The below illustrates the routing of the questionnaire.

Figure 1: Questionnaire flow


## Changes from 2022 survey

This research is a follow-on study from the 2022 pilot of the same name (i.e., Children's Online User Ages). However, significant changes have been made to the 2023 survey taking into account learnings from the 2022 survey to achieve clear and more robust findings. Therefore, it is imperative to note that no comparisons should be made to the 2022 pilot data. The changes to the 2023 survey include:

- Collection of demographics: the 2022 survey did not need to use all the demographics collected for analysis; therefore, we reduced the types collected for 2023 (i.e., education, income, benefits, ethnicity and urbanity were not collected).
- Age calculation: the 2022 survey asked for the child's age in years rather than their date of birth (e.g., age 12). This will on average underestimate age by half a year (e.g., assumes someone is 12 up until they are 13 - even when they may be aged 12 and 364 days). Therefore, there is a small risk that the calculated user age won't be completely accurate; so, for 2023 we asked for exact date of birth for more precise calculations.
- Additional questions on profile date of birth: the 2023 survey included additional questions asking if respondents have changed their date of birth on their profile since setting it up. This was not needed for user age calculation but is additional insight as to whether either children and/or services are attempting to correct user ages in order to receive/deliver appropriate content. Further insight was sought into whether respondents have been asked to prove or verify their age or date of birth on their profile, and what method was used to do so.
- Platforms asked about: the 2022 survey asked about the six most used platforms according to our media literacy research; for 2023 we expanded this list based on usage from a broader range of Ofcom research, therefore adding Discord, Pinterest, Twitch and Vimeo to the 2023 list.
- Clarification of YouTube use: the 2022 survey included 'YouTube' which younger respondents may have included in their response but instead were thinking of 'YouTube Kids' (which is tailored for younger viewers); therefore, the 2023 survey made it clearer to respondents by stating 'YouTube (not including YouTube Kids)'.
- Inclusion of all platforms in responses: the 2022 survey centered analysis and user age calculations on respondents' top three platforms; for 2023 we included all platforms in the full analysis.
- Removed 'multiple profiles': the 2022 survey asked if respondents had multiple profiles, however the base sizes were too low to report on, therefore the 2023 survey did not include this question.
- In the 2023 questionnaire we do not ask about multiple profiles and children are free to select which profile (if they have more than one) to answer about


## Fieldwork and Sampling

## Fieldwork method

The survey was conducted using the YouGov bespoke online survey platform. Fieldwork ran from 17th August -1st September 2023.

Only respondents who were invited to take part could do so; the survey could not be undertaken in any other way. The median survey length was 8 minutes and 47 seconds.

## Sample design

The sample was drawn from the YouGov online panel comprising over 2.7 M adults across the UK. YouGov maintains engagement with communities of panellists who have specifically opted in to participate in online research activities and provide demographic details such as their parenthood status. As a result, the panel provides access to a responsive audience, who have already provided information on important demographic, attitudinal, and lifestyle attributes. Members of the panel consent to completing surveys for YouGov in return for a modest financial incentive.

The sample for the survey was designed to be representative of UK internet users aged 8 to 17 years old and was organised by the following cross-breaks: 8-12, 13-15 and 16-17-year-olds.

For our user age calculations, respondents needed to have their own social media profile on at least one of the following social media apps/sites: YouTube (not including YouTube Kids), Snapchat, TikTok, Instagram, Facebook, Discord, Pinterest, Twitch, X/Twitter, Vimeo, and/or any other apps/sites specified by the child.
'Boost' interviews were conducted where fewer than 50 interviews were achieved per age group per app/site in the initial round of 'main sample' recruitment.

Once the sample had been drawn, an invitation was sent by email with a link to the survey embedded within it. All respondents participated in the survey in exactly the same way and the YouGov panel management team ensured the invitations to the survey were consistently and professionally managed.

## Sample approach

YouGov holds information on the number and the age of children that a panel respondent has, and this information was used in order to contact children under the age of 18. These children took part in the survey via their parent's YouGov account. Eligible panellists (i.e., the parent) were contacted by email and taken to a landing page containing the subject matter, the purpose of the work, and how the anonymous results will be shared and used. The panellist can then consent or decline (screen out) their child participating in the survey. If the parent has consented, the first survey page for the young person is a tailored version of the landing page and, again, a specific opt-in box to consent to take part in the survey.

## Sample size

A target of 1,500 interviews was agreed with Ofcom prior to fieldwork, with the aim of achieving a minimum of 50 respondents per age group per platform to ensure robust analysis. During the
fieldwork period, and taking into account a lower number of responses for certain apps/sites, the initial sample size of 1,500 was extended to 1,688 to ensure at least 50 interviews among all subgroups of interest (i.e. via boost interviews - see below).

- A total of $n=3,454$ respondents, including the boosts, started the survey (i.e., clicked the link within the email invitation).
- A total of $n=1,538$ were screened out as either the parent or child did not consent to take part in the survey, or they did not meet the survey criteria. Respondents could also be screened out of the survey because the quotas they fitted into had already been filled.
- With $n=1,538$ being screened out at the start of the survey, this meant a total of $n=1,916$ respondents participated.
- Among the $n=1,916$ who participated in the survey, a total of $n=85$ respondents subsequently dropped out (i.e., started, but did not complete the survey). Therefore, the final number of completes achieved was $n=1,831$ (including boost interviews).
- After the data cleaning process, the final sample size was 1,806 . (Details on the data cleaning process can be found in the 'Analysis and quality assurance' section of this document.)


## Boost interviews

Sample boosts were applied after the main fieldwork had been completed to allow for base sizes to be robust enough for analysis for each age group per platform.

Additional boosts were applied to following age groups:

- 16-17-year-olds: to achieve a minimum of 50 Twitch profile owners within this age group;
- 8-12-year-olds: to reach a minimum of $50 \mathrm{X} /$ Twitter profile owners. However, due to the low incidence rate of $X$ /Twitter usage amongst 8-12-year-olds, the fieldwork achieved a total of just 31 completes for this subgroup.

The final number of completes achieved during the boosts was $\mathrm{n}=143$.

## Analysis and quality assurance

## Data cleaning

To ensure accuracy and quality of the data, respondents were 'cleaned out' of the data if they could not provide the necessary demographic information or indicated that they gave false answers for example, if they provided an open-ended answer which was not relevant.

Prior to data cleaning, the total number of completed responses was $n=1,831$. A total of $n=25$ respondents were cleaned from the final data.

Table 1. Response overview

|  | Target (N) |
| :--- | :--- |
| Number of participants approached* | 3,454 |
| Number of participants screened out* | 1,538 |
| Number of participants dropped out* | 85 |
| Number of final nat rep interviews | 1,688 |
| Number of final boost interviews | 143 |
| Number of final sample (Nat rep plus boosts) | 1,831 |
| Total participants removed after QA checks* | 25 |
| Core sample size used for analysis* | 1,806 |

*Including boosts interviews

## Data weighting

Weighting adjusts the contribution of individual respondents to aggregated figures and is used to make surveyed populations more representative of a project-relevant, and typically larger, population by forcing it to mimic the distribution of that larger population's significant characteristics, or its size. The weighting tasks happen at the tail end of the data processing phase on cleaned data.

In this respect, the data (excluding boosts) were weighted to ensure the data represented the national profile of young people aged 8 to 17 across the UK by age crossed by gender, and region. The main sample has been weighted as described then merged with the boost data.

Table 2: Sample Representativeness - Child age/gender and Regions:
The following table shows both the initial unweighted sample and the final weighted sample profiles:

|  | Unweighted <br> counts | Unweighted \% | Weighted counts |
| :--- | :---: | :---: | :---: | Weighted \%

Table 3: Sample Representativeness - Social media profiles by age groups
The following table shows both the initial unweighted sample and the final weighted sample profiles for users with an account for each social media app/site by age group:

| Age groups: | 8-12 years old |  | 13-15 years old |  | 16-17 years old |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unweighted <br> (N) | Weighted <br> (N) | Unweighted <br> ( N ) | Weighted <br> (N) | Unweighted <br> ( N ) | Weighted <br> (N) |
| Apps/Sites |  |  |  |  |  |  |
| Facebook | 108 | 110 | 128 | 123 | 154 | 151 |
| YouTube * | 511 | 522 | 285 | 278 | 237 | 233 |
| Snapchat | 340 | 349 | 328 | 318 | 298 | 292 |
| Instagram | 161 | 165 | 276 | 266 | 309 | 303 |
| TikTok | 351 | 360 | 329 | 318 | 259 | 254 |
| Twitter | 31 | 32 | 55 | 54 | 86 | 85 |
| Discord | 130 | 132 | 120 | 118 | 91 | 89 |
| Pinterest | 72 | 75 | 94 | 89 | 78 | 76 |
| Twitch | 59 | 60 | 60 | 59 | 57 | 56 |
| Vimeo | 6 | 6 | 1 | 1 | 3 | 3 |
| Other | 93 | 95 | 17 | 17 | 10 | 10 |

*Not including YouTube Kids

## Significance testing

Significance testing for the study has been applied at 95\% for the purposes of analysis.

## User age calculations

Due to the complexity of calculating user ages, it should be noted this is an estimate of what we consider the minimum proportions of children with a profile that is older than their actual age To be included in user age calculations, every respondent must first confirm they use at least one of the apps/sites listed in the survey and then have their own personal profile on the relevant apps/sites they use.

Considering 13 as the minimum age to create a profile on nearly every social media app/site in our study (apart from Vimeo where the minimum age is 16), respondents' user ages were grouped under three age breaks: 13-15, 16-17, and 18+.

If respondents did not have a personal profile for any apps/sites, they were screened out and did not complete the survey.

For an illustration of the user age calculations please refer to the Scenarios document here.
The chart pack also lists all the caveats to the user age calculations which can be found here.
Table 4: Questions used for user age calculations:
The following table shows questions used for the 'user age calculations':

| Questions: | Scales/Options: |
| :---: | :---: |
| P3. Real Age | With exact values for year, day, month |
| Q3. How long have you had your own profile on each of these platforms? | 1. Less than a year <br> 2. 1 year <br> 3. 2 years <br> 4. 3 years <br> 5. 4 years <br> 6. 5 years <br> 7. More than 5 years <br> 8. Don't know |
| Q4. Have you ever changed your date of birth on your profile since setting it up? | 1. Yes <br> 2. No <br> 3. Don't know |
| Q6. What date of birth does your profile have now? Please remember you won't get in trouble for answering truthfully. | 1. My actual date of birth <br> 2. A different date of birth to make me older than the previous date of birth entered <br> 3. A different date of birth to make me younger than the previous date of birth entered <br> 4. Don't remember <br> 5. Prefer not to say |
| Q7. How old does this new date of birth make you now on the app/site? It makes me... | 1.10 2.11 3.12 4.13 5.14 6.15 7.16 8.17 |


|  |  |
| :---: | :---: |
| Q8 What date of birth was used when your profile was set up? | 1. My actual date of birth <br> 2. My birthday but a different year (making me older) <br> 3. A random birthday (making me older) <br> 4. Someone else's date of birth who is older than me/ my parent/carer's date of birth <br> 5. Other date of birth to make me older <br> 6. Don't remember |
| Q8a. Do you know how old this date of birth would have made you on the app/site when the profile was set up? It made me... | 1. 10 <br> 2. 11 <br> 3. 12 <br> 4. 13 <br> 5. 14 <br> 6. 15 <br> 7. 16 <br> 8. 17 <br> 9. $18+$ <br> 10. Don't remember / Don't know |

## How current profile 'user age' was calculated:

The total number of respondents included in user calculations was $n=1548$.
The user age calculations were made based on two main conditions (see Figure 2 overleaf):
1- If the respondents have changed their date of birth since the setting up their profile.
2- If the respondents have NOT changed their date of birth since the setting up profile.
Table 5 - Respondents excluded from the calculation

The following table shows the conditions and the number and proportion of respondents that have been excluded from the calculation:

|  | Counts overall | \% of total weighted sample <br> impacted (base: 1806) |
| :--- | :--- | :--- |
| If Q3 = 'Don't know' AND if Q8= 'Don't <br> remember' | 34 | $2 \%$ |
| If Q3 = 'Don't know' AND if Q8a= 'Don't <br> remember/Don't know' | 3 | $1 \%$ |
| If Q4 = 'Don't know' | 206 | $11 \%$ |
| If Q6= 'Don't remember' or 'Prefer not to <br> say' | 26 | $2 \%$ |


| If Q7= 'Don't remember/Don't know' | 34 | $2 \%$ |
| :--- | :--- | :---: |
| Appeared to have misunderstood Q4 after <br> reviewing their open-ended response to Q5 | 22 | $1 \%$ |

In addition to excluding some respondents, we also considered other caveats. For the full list of caveats please refer to the chart pack which can be found here.

Figure 2: User age calculations scenarios:
A full set of potential scenarios are shown in the Scenario document.

## If the date of birth changed since the setting

 up of the profile: (Code 1=Q4) changed to the actual age (code 1= Q6) Scenario 5

Q6:

If the changed date of birth is the actual date of birth and it is $13+$, the user age $=$ the actual age

If the actual age is under 13 , then the user age $=$ 13


Q7:
If the age stated after changing is $<13$ the user age $=13$

If the age stated after changing is $\geq 13$ = the user age

If the date of birth NOT changed since the setting up of the profile: (Code 2=Q4 - excluding respondents recoded due to open end responses)

If the setup age is the actual age (code 1=

$$
\text { Q8) Scenario } 1 \text { and } 2
$$

Q8:

If the setup age was the actual age and the actual age is $13+$, the user age $=$ the actual age

If the actual age is under 13 , minimum user age of 13 plus the length of time on the site/app (Q3) = the user age

If the actual age is
under 13 and they
don't know how long they have been on the site/app, assume minimum user age of 13 = the user age


Q8a. The age entered at set up plus length of time on the site/app (Q3) = the user age.

If the age entered at set up is $<13$, assume minimum user age of 13 plus length of time on the site/ap (Q3) = the user age. If the respondent doesn't know how long they have been on the site/app then assume minimum user age of 13 $=$ the user age

Respondent is under 13, but age at set up is 13-17 and the respondent doesn't know how long they have been on the site/app, assume age at set up = their user age.

Respondent is 13 or over, and age at set up is 13-17 and the respondent doesn't know how long they have been on the site/app, assume age at set up (if older than actual age) = their user age OR assume actual age (if older than age at set up) = their user age.

## Caveats

## General caveats

All findings should be analysed noting that these were self-reported estimates from child respondents. Therefore, results should be treated with caution and viewed as indicative because:

- Children may have to admit that they were using these platforms underage, and some may not be willing to answer truthfully in a survey.
- They may not be able to accurately recall certain information, e.g., the age they used when setting up their profile or how long they have had their profile.
- Due to low base sizes $(\mathrm{n}<50)$ of those with their own profile, we were unable to report on Vimeo for all age groups, or for $\mathrm{X} /$ Twitter for 8 -12-year-olds.
- When providing information about which apps/sites they use, respondents were able to select an 'Other' option. The base sizes were too low to report by sub-group on these other apps/sites (120 respondents overall), but they have been included in the user age calculation.


## User age caveats

1. For those respondents who said their user age was younger than 13 years, for our calculations we have assumed their user age to actually be 13 when they signed up as per the minimum age limit on most social media platforms.
a. For this calculation, we have assumed the respondent did not recall their date of birth accurately, as the minimum age requirements on the platforms explored in this study require profiles to include a date of birth making the respondent at least 13 . If a child tried to make a profile using a date of birth which showed their age as under 13 , the platform would reject the profile.
2. For those who did not know the age they used when they set up their profile, we took their current age minus years on site to estimate their joining age.
a. For example, if a respondent's real age was 14 , and they have used a platform for 3 years, they must have joined the platform at the age of 11, but would have had to state they were at least 13 to join.
b. Assuming they set their joining age to 13 and they have been on the platform for 3 years, their 'user age' will now be 16, although their real age is 14.
3. If a respondent has a different user age on several platforms, the profile with the oldest user age has been used for the calculation.
a. For example, a respondent has a user age of 13 on Site $A$, and a user age of 17 on Site $B$ - we have used the user age for Site $B$ as this is the one with the higher likelihood of seeing or receiving age-inappropriate content or contact.
4. For those respondents who said they had their profile for less than a year, we have grouped the time they have had a profile as ' 0 ' years. Hence, we underestimated the amount of time they were on the platform, rather than overestimated.
5. A few cases of younger children aged 8 or 9 claimed to have had a personal profile for more than five years. This suggested either their profile was set up by their parents or, due to their young age, they were unable to evaluate time accurately. We still calculated their user age based on the information they provided.
a. Assuming they set their joining age to 13 and they have been on the platform for $5+$ years, their 'user age' will now be 18+.
