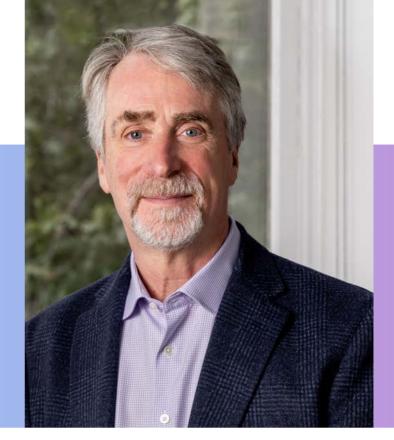


Introduction

Age assurance online has challenged websites, platforms, and apps for over two decades. While it is agreed that keeping children in ageappropriate spaces is a fundamental part of their safety, determining age is difficult to do without a method that also requires personal data.



Numerous attempts to address this problem have returned to face a central question: How do we balance the effectiveness of a solution or technology with the invasiveness that it may bring? Or, more simply, how do we determine what is a reasonable tradeoff between safety and privacy?

This research looked at the awareness and attitudes of parents and children towards age assurance methods across the US, UK, and France. By surveying three countries, the goal was to compare and contrast the perspectives of parents and children based on cultural approaches to technology use and parenting style, attitudes toward safety and privacy, and more specifically their perceptions of current practices and future possibilities for age assurance.

For solutions to be well-received, parents and children must be educated to understand their purpose and benefit. Technology companies and third-party providers have worked to advance technologies from age gating to age estimation, but they must also be able to transparently communicate these methods to users in a way that will build trust. We must also involve children themselves in the processes and policies that will directly impact their safety and online experiences.

Lastly, governments will have to do a better job at harmonizing their regulations. We currently have a patchwork of laws at state, federal, and international levels that makes the implementation of age assurance more difficult than it already is. It is our hope that this report will help to inform the debate in a way that will lead to more balanced and enlightened legislation.

So please use the findings to inform your own work, whether it be in industry, government, the nonprofit sector, academia, or research. Getting age assurance right will take the ingenuity and abilities of all sectors of society. It remains a missing and vital link to making the online world safer for kids and their families.

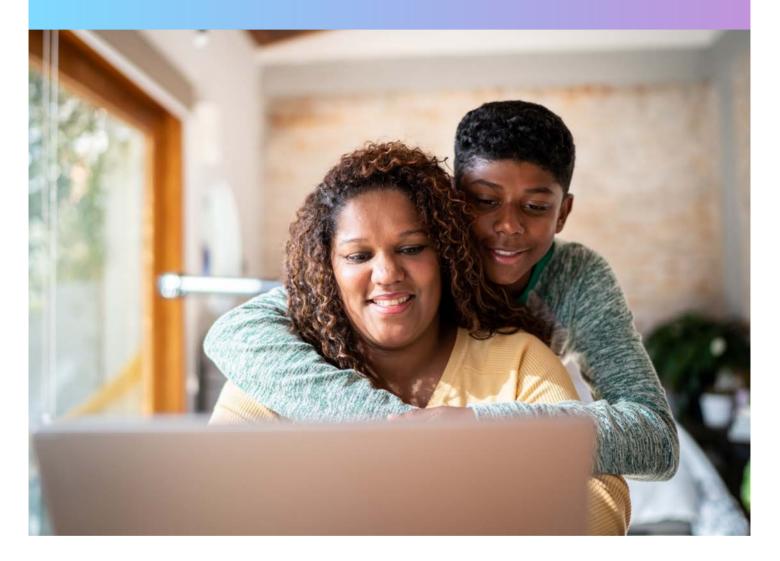
Stephen Balkam, CEO Family Online Safety Institute November 2022



Contents

About This Study	03
Methodological Overview	04
Key Findings	05
Introduction to the Digital World and Age Assurance	09
Lay of the Land: Online Safety, Privacy, and Age Assurance Today	11
Age Assurance Deep Dive: Evaluating Current and Prospective Methods	19
Paving the Way Forward	26
Appendix	27

About This Study



This study was conducted by Kantar on behalf of the Family Online Safety Institute. It explores the awareness, attitudes, and behaviors of both parents and children regarding age assurance – a process that encompasses the methods and solutions used to verify or estimate a user's age on online services and apps.

The goal of the study was to assess the understanding of age assurance among both parents and children, including the perceived effectiveness of current methods. A brief exploration of receptivity to future solutions is also included.

The study explores related topics such as views of broader online safety, parental monitoring behaviors, and attitudes about who is responsible for keeping children safe online.

Research was conducted in the United States, United Kingdom, and France. This cross-market approach points to interesting similarities and differences in how parents view technology and approach managing their children's online activity.

Methodological Overview

This study was conducted in a two-phase approach, including both qualitative and quantitative elements:





Phase I: Qualitative Journal

A qualitative, 3-day online journal was conducted July 12 – July 29, 2022. Seventy-one parents and children participated across the US, UK, and France. The qualitative work informed the design of an online survey of parents and children aged 9-12 and 13-17 in the US and UK as well as children aged 10-14 and 15-17 in France.

United States	United Kingdom	France	
n= 12 Parents	n= 13 Parents	n= 12 Parents	
n= 11 Children	n= 12 Children	n= 11 Children	

Phase II: Quantitative Survey

An online quantitative study conducted August 26 - September 19, 2022, across the US, UK, and France.

Both parents and their children participated in the same survey, where the parent completed the first half and their child the second.

1000 surveys (combined parent and child responses) were completed in each of the three countries: the US, UK, and France, for a total sample of 3,000 parents and children.

The quantitative survey was fielded among parents and children aged 13-17 years old.



Parents are highly engaged with their children's digital lives and are invested in facilitating a safe, positive online experience.

Parents put a great deal of time and effort into managing children's online activities and ensuring responsible technology use.

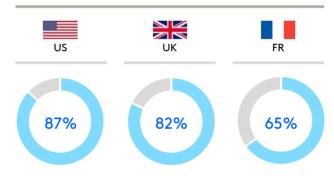
Parents in the US tend to take the most handson approach, with **87%** reporting that they use or have used tech tools such as parental controls, monitoring apps, or other software to oversee their children's digital lives.

Children, like parents, want safe and positive online experiences, and children understand that parents monitor online activity with good intentions.

Parents' efforts to safeguard online experiences are felt by children. Some **97%** of children in the US and UK, and **90%** of children in France, feel safe online and acknowledge parental monitoring methods are in place for their protection.



% of parents that use or have used tech tools to monitor their children's online usage



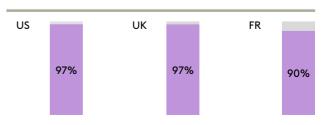
 Ω

% of children agree my parents monitor my online activity to protect me from harm





% of children feel safe online



Key Findings

Parents see themselves as having the most responsibility for managing their children's access to age-appropriate content, more so than technology companies or the government.

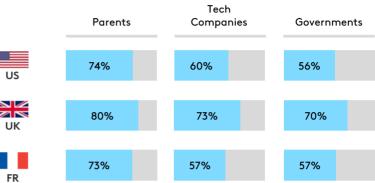
This sense of responsibility is coupled with concern on the part of parents that they are not equipped to succeed. They feel daunted by the task of understanding safety measures and enforcing responsible technology use, while at the same time respecting children's privacy as they get older.

Even as parents feel this strong sense of responsibility, they also want more involvement from relevant partners to help safeguard their children.

Nearly 7 in 10 parents in the US, and roughly 6 in 10 parents in the UK and France, believe that technology companies and governments should be more involved in protecting children online.

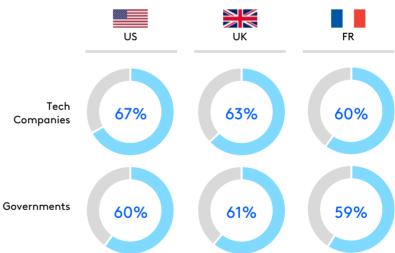


% of parents that agree industry and governments hold high responsibility for managing age-appropriate content





% of parents that believe industry and governments should be more involved in protecting children online

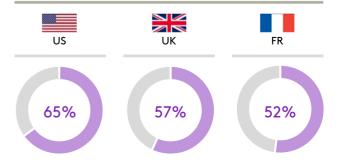


Children also desire an active role in the processes that will shape their digital lives, even if they are not always comfortable discussing their online activities with parents.

A majority of children in the US (65%), the UK (57%), and France (52%), report wishing that parents would consider their opinions more when determining the rules and parameters for their technology use.



% of children agree "I wish my parents took my opinion into account more on what/how they manage technology use"



Key Findings

Age assurance is seen by parents and children as being more about restricting access to content, rather than ensuring safe and beneficial online experiences.

This is most pronounced in the UK and France. In France, roughly **50%** of parents and children associate age assurance with restricting content, compared to **27%** who interpret it more positively with creating a safer online environment.

age assurance is: Children Ensuring safe and A process to restrict children from accessing beneficial online certain content experiences for children 45% 40% 38% 45% 48% 36% 48% 35% 48% 27% FR 50% 27%

Based on your understanding,

There is no clear 'winner' or standout approach when respondents are asked about their preference for current age assurance methods.

Neither parents nor children are able to agree on a singular age assurance method that addresses all of their concerns. No method is preferred by more than **32%** of respondents.



Preferred Methods of Age Assurance

Parents Children 27% Parental verification via text or app 32% Parental verification via text or app Children 24% Methods with a biometric component a biometric component via text or app 26% Self-declaring date of birth

FR

Parental verification via text or app



Audio phone or video call

Parents

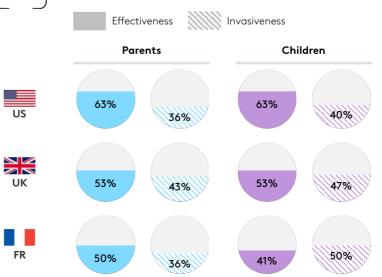
This ambivalence appears to come down to a question of balancing invasiveness vs. effectiveness.

Verifying a child's age with their ID is considered the most effective method, but also the most invasive.

Parental verification via text or app, such as a push notification, seems to strike a happy medium.



Effectiveness and Invasiveness of Verifying Age with a Child's ID



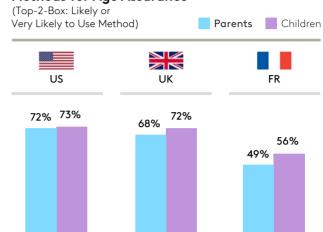
Key Findings

The applied use of biometrics appears to be a promising method of age assurance, as parents and children view it as effectively assessing age.

Over two-thirds of parents and children in the US and UK and roughly half in France indicate that they are open to age assurance methods that include a biometric component, and nearly two-thirds of parents across all three countries feel that biometrics are an effective tool for assessing age.



Likelihood of Using Biometric Methods for Age Assurance



Parents seek age assurance solutions that are effective yet convenient, and they gravitate toward settings that achieve both.

If offered, parents report that their most ideal method for setting age assurance on apps and services would be on a per account basis - the point at which they are downloaded from an app store.



Ideal Age Assurance Settings for Apps and Services

	Per Device	Per Account	Per App	
JS	22%	40%	38%	
JK	29%	38%	33%	
FR.	23%	41%	36%	



These insights and the findings that follow in this report point to tangible opportunities for industry and governments to meet the complex challenge of age assurance and improve how methods are developed, implemented, and perceived by users.

Raising Children in a Digital World

Parents view the Internet as a crucial tool that contributes to their children's growth and learning. They keenly understand the central role that technology plays in children's lives, and value how being online lets young people expand knowledge and develop a sense of belonging and community. Children also value these aspects of online life, as well as the way the digital world lets them have fun and be creative.

Figure I: Most Important Values in the Online Experience for Children (Top Ranked - 1st) Parents Children US UK FR 31% 30% 37% Safety and security 18% Expanding knowledge 12% 14% 13% Having fun and being creative Making processes or 10% daily activities easier Developing a sense of 9% 8% belonging or community Developing skills that can be applied in-person/offline Creating meaningful experiences 10% Providing more equal opportunities 8%

COMMON CONCERNS

While they acknowledge the positives, parents are also clear-eyed about the potentially negative aspects of digital life. Parents in the US, UK, and France share many of the same concerns about their children accessing the Internet, with some subtle differences.

Concerns including exposure to strangers or harmful content were top of mind for parents across all three countries. Parents in the US and UK were more concerned about exposure to harmful content than their French peers. Bullying was the biggest concern among French parents and children, higher than in either the US or UK (Figure II).

ACTIVE MANAGEMENT IS KEY FOR PARENTS

Addressing the questions and concerns associated with digital life is not a one-time event for parents and children, but an evolving process that parents know they have to actively manage over time. As children get older, both their online interests and need for independence change, and conversations must advance along with them.

This ongoing oversight takes time, with parents reporting that they spend multiple hours per week monitoring their children's online activities (Figure VI). This monitoring also creates tension for at least some parents as they strive to balance responsible supervision with intrusion.

Figure II: Primary Concerns with Children Accessing the Internet (Select Three)

	US		UK		FR	
	Parents	Children	Parents	Children	Parents	Children
Online strangers / bad actors	45%	41%	48%	47%	43%	45%
Exposure to harmful content	45%	37%	48%	36%	37%	27%
Giving away too much personal information online	37%	38%	36%	39%	29%	23%
Information being hacked or stolen	36%	42%	34%	42%	35%	47%
Too much screen time/overuse	32%	27%	31%	22%	37%	22%
Bullying	30%	32%	39%	39%	44%	49%
Companies tracking information for targeted ads	28%	29%	20%	24%	16%	16%
Not spending time outside or having offline interactions	26%	24%	25%	17%	25%	15%

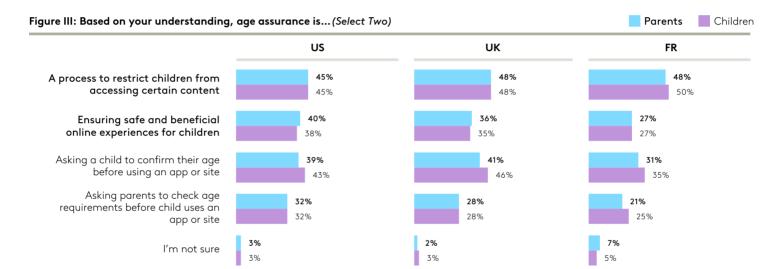
"I talk to my children daily about their technology use. We typically are discussing what they are watching and the amount that they are on their various devices."

Mother of 9- to 12-year-old, US



Ideally, age assurance would be understood and recognized by parents and children as a fundamental element of their online experience by ensuring that young users stay in the age-appropriate spaces designated for them and have an overall safer, more positive digital life.

What this study found, however, is that many parents and children regard age assurance as being more about restricting access to content than fostering safe online experiences for children. This attitude was evident across all three countries, and more pronounced in the UK and France than in the US.



Parents appreciate that methods to establish a user's age, such as entering a date of birth or providing an ID, are intended to protect children. However, they are also skeptical of how effective common methods are, and aware of the potential for circumvention. This study also finds that parents and children do not feel there is any clear winner among current age assurance methods. There is no substantial preference for one method over another, as parents and children seem to be continuously weighing a variety of tradeoffs - ease of use, effectiveness, and invasiveness - as they consider age assurance methods.

These tradeoffs appeared clearly in the qualitative research. Parents articulated the challenge they face in balancing safety and privacy, while simultaneously teaching children how to be responsible digital citizens.

"All of it is based on honesty. I don't like the games having their birthdays. I had made false birthdays for each of my kids with the correct year to help limit risk."

Mother of 13- to 17-year-old, US

The Bottom Line

There is a clear opportunity to improve people's perception of age assurance methods, which must begin by helping them to understand these methods. This means providing clarity around the purpose of assuring age, how the process works, and how users benefit.

Lay of the Land: Online Safety, Privacy, and Age Assurance Today



Respondents for both the qualitative research and quantitative survey seem to view online safety and online privacy through a similar lens as two closely related, and equally important, parts of ensuring a more positive online experience.

However, perceptions of age assurance differ from online safety and privacy, and children tend to associate age assurance with restriction rather than safeguarding.

Establishing a thorough baseline understanding of perceptions toward online safety and privacy was an important precursor in this study, as attitudes toward age assurance take both largely into account.

"I use [social media] and my mum has set the account to private to help me stay safe. I think the rules are there so other people are not inappropriate online and to not get cyberbullied."

Child, 9- to 12-years-old, UK



PROTECTING PERSONAL INFORMATION IS PARAMOUNT

Among both parents and children, securing and managing personal information is viewed as critical to maintaining both online safety and online privacy.

In the survey, 84% of US parents and 72% of US children agree that online safety is primarily about securing personal information. High levels of association were also seen in the UK and France (Figure IV).

Similarly, managing personal information was the second most common response among parents in the US and France when respondents were asked to select their top associations with online privacy. In the UK, it was the most common response (Figure V).

This illustrates, if not a deeper understanding of what happens to information once it is collected, an awareness that controlling personal data is a critical part of maintaining privacy and being responsible and safe online. Parallels arose here when later questions that directly assessed attitudes toward age assurance methods caused a perceived loss of data privacy.

While safety and privacy are important across the board, there are key differences between how children and their parents view them.

HARM REDUCTION AND EXPLORATION

In addition to securing personal information, parents also see online safety as relating to the reduction of potential harm: keeping children away from bad actors and diverting them from inappropriate content (two of their top three concerns) (Figure IV).

While children are not ignorant of potential risks online, they also tend to see general safety with a more positive mindset than parents. Children are more likely than their parents (about 6 in 10 children versus 3 in 10 parents) to feel that safety practices are something that enables them to explore the Internet with peace of mind (Figure IV).

ANONYMITY KEY TO PRIVACY FOR PARENTS

Many parents link anonymity to their idea of online privacy, which was most pronounced in France, followed by the US and UK (Figure V). This focus on anonymity could be a positive indicator for the continued rise of age assurance methods such as age estimation, where for example, facial features are scanned for accuracy within an age range, without a connection to identity or personal information.

Children were less likely to consider anonymity an essential part of privacy, but with some clear distinctions among the three countries (Figure V).

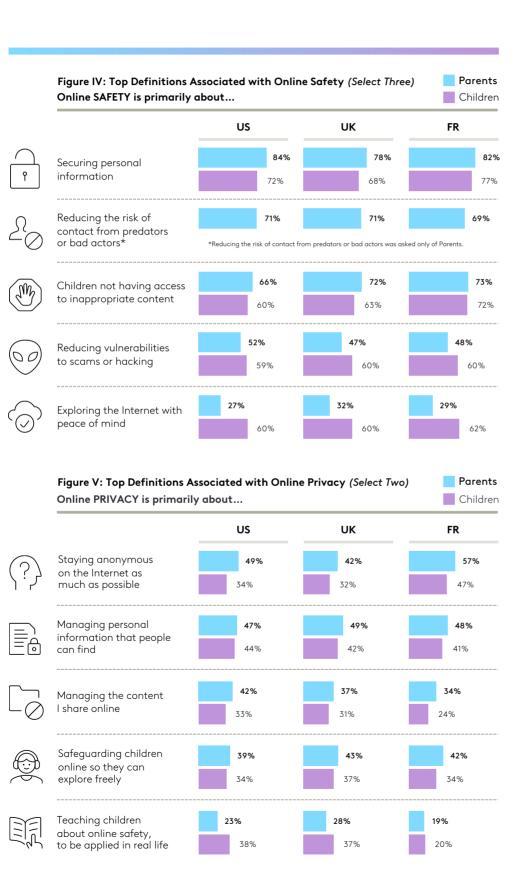
"Being 'safe on the internet' for me means not talking to strangers or giving anyone your information."

Child, 13-17 years old, US

The fact that children are less likely than their parents to connect online privacy with anonymity may be because they were born into the digital world and have been interacting in online spaces from younger ages. They do not view their online lives as something separate and distinct from their offline lives the way older generations might, and may therefore not have as much expectation for anonymity in daily activities or see it as a desirable approach to maintaining privacy.

These reflections are important when working to understand the reactions of both parents and children to age assurance. Their response to certain methods will depend on the level of understanding they have around benefits and tradeoffs.

To make a truly informed choice, parents and children will need to understand any privacy and safety implications of age assurance methods, and feel positive about what they gain by participating.





Balancing Rules and Restrictions:Parental Monitoring and Control

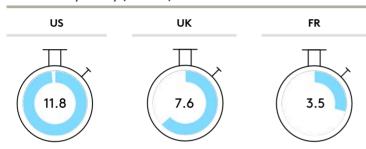
"It's my parents who create my accounts and check that it's for me."

Child, 10- to 14-years-old, France

PARENTS ARE ENGAGED GATEKEEPERS

Given their concerns, it is not surprising that parents spend a significant amount of time monitoring what their children do online. This is most pronounced in the US, where parents report spending over 11 hours per week monitoring the online activity of their children versus 7.6 hours in the UK and 3.5 hours in France.

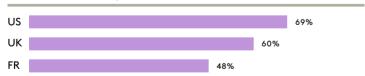
Figure VI: Average time parents spend monitoring online activity weekly (in hours)



OVERSIGHT COMES WITH STRESS

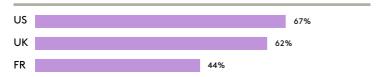
Nearly all children report feeling safe online (97% in US and UK, and 90% in France). This is partially due to knowing their parents are looking out for their safety, as they acknowledge parental efforts make them less worried about online risks. At the same time, this can come at a cost. Children aged 13-17 in the US (69%), the UK (60%), and France (48%) describe their parents' management of online activity as very or moderately restrictive.

Figure VII: Child Impression: Find their parent(s) restrictive (Top-2-Box Children Agreement: very/moderately restrictive)



Furthermore, many children say their parents' activities make them feel spied on. This is more prominent in the US and UK (67% and 62%, respectively), and lowest in France (44%) where parental time spent monitoring is substantially lower.

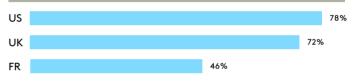
Figure VIII: Knowing that adults are looking out for my safety and privacy online makes me feel watched or spied on (Top-2-Box Children Agreement)



AT HOME, SAFETY TRUMPS PRIVACY

For their part, many parents seem to be making a judgement that safety trumps privacy when it comes to directly overseeing their children. This is especially true in the US and UK, where 78% and 72% of parents agreed with the statement: "Overall, I believe that monitoring and safeguarding my child's online activity is more important than their privacy." By contrast, only 46% of French parents agree.

Figure IX: Overall, I believe that monitoring and safeguarding my child's online activities is more important than their privacy (Top-2-Box Parent Agreement)



Parents shared concerns anecdotally as well, detailing the challenge of striking a balance between safety, privacy, and reasonable oversight:

"I want to monitor what my daughter is watching and who she is talking to, but I also want to respect her privacy. It's a thin line that my wife and I discuss often."

Mother of 9- to 12-year-old, US

"I do put age restrictions on for the youngest. I find it's a fine line between not being too restrictive that drives them to circumvent restrictions or not being cautious and allowing them to do whatever."

Mother of 13- to 17-year-old, UK

"No monitoring tools, just a matter of trust."

Father of 15- to 17-year-old, France

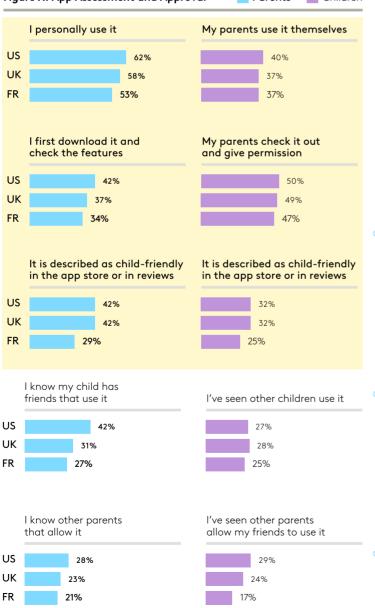
Understanding Parental Oversight: Managing Age Requirements

MOST PARENTS ROAD TEST APPS BEFORE APPROVING THEM

In addition to monitoring online activity, many parents also try to learn directly about the online services their children want to use, to road test if they are appropriate. In fact, parents report that the most common way they assess the safety of an app is to download and use it themselves (62% in the US, 58% in the UK, and 53% in France), ensuring they decide firsthand whether it is safe. Other ways they make this determination are to look at whether it is described as child-friendly in the app store description or in reviews.

Figure X: App Assessment and Approval

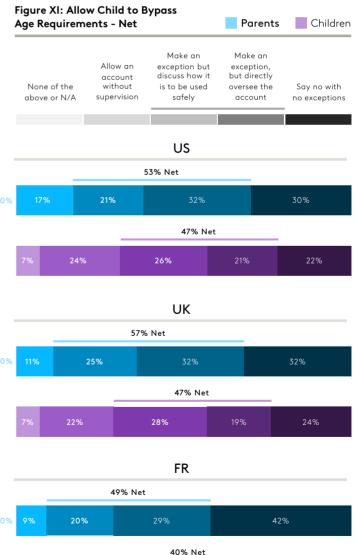




CIRCUMVENTING AGE REQUIREMENTS OFTEN RESULTS IN DIRECT OVERSIGHT

When children ask to use apps and do not meet the minimum age requirements, parent behavior varies.

Most parents are willing to make an exception or allow their child to bypass the age requirement altogether, but then require direct oversight of the account or discussions about how to use the app safely (53% in the US, 57% in UK, and 49% in France). A smaller share of parents say no without exception, with French parents (42%) being most likely to report taking this approach versus US parents (30%) and UK parents (32%).



22%

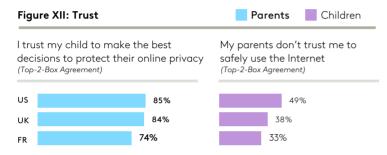
18%

Safeguards and Independence:

Children Seek Parents' Trust

PERCEPTIONS OF TRUST VARY BETWEEN PARENTS AND CHILDREN

A strong majority of parents across all three countries report that they trust their children to make good decisions about protecting their online privacy. Yet, this sense of trust is not always reflected in children's perspectives. Half of children in the US (49%) agree with the statement: "My parents don't trust me to safely use the Internet." Agreement in the UK (38%) and France (33%) are lower, but still substantial.



This disconnect may be circumstantial, in instances when trust is temporarily broken. Parents anecdotally share a desire to trust their children as much as possible, but that children breaking rules or being dishonest can quickly erode confidence.

"My strategy only works if you have kids that you can trust to (mostly) do the right thing. There have been a few times where kids were dishonest and we had to resort to following up by checking phones directly. It resulted in some grounding and a while before we could trust them the same again.

Father of 13- to 17-year-old, US

36%

In addition to the varying views on trust, there is some disconnect regarding important conversations about online activity. The vast majority of parents report having open conversations about online privacy with their children. At the same time, nearly half of children in the US and roughly a third in the UK and France say they are not comfortable discussing online activity with their parents.

Figure XIII: Openness and Comfortability

Parents

Children

My child and I openly
have conversations about
online privacy (Top-2-Box Agreement)

I don't feel comfortable discussing my online activity with my parents (Top-2-Box Agreement)

91%

UK

PARENTS' GRIP LOOSENS AS CHILDREN GET OLDER AND MORE MATURE

Parental oversight tends to relax as children get older, with less negotiation and less restriction. Significantly more tweens feel their parents are "very or moderately" restrictive (72% in the US, 65% in the UK, and 55% in France) than their teen counterparts (65% in the US, 53% in the UK, and 40% in France).

Parents who were asked how their oversight evolved over time saw an opportunity to ease age restrictions as children grow older.

"When younger, we could control exactly what was on his phone and then as he got older let him make more choices to control his phone."

Father of 13- to 17-year-old, US

"The age limits seem to be noted at set up time. As kids grow, access levels should change with new ages."

Mother of 13- to 17-year-old, US

CHILDREN WANT A SAY IN ONLINE SAFETY DECISIONS

Even if children are not always comfortable discussing every element of their digital lives with parents (Figure XIII), they do want a seat at the table and a say in the decisions that affect them.

Children in the US (65%), the UK (57%), and France (52%) report wishing their parents would consider their opinions more when determining the rules and parameters for technology use.

Figure XIV: Top-2-Box Children Agreement on "I wish my parents took my opinion into account more on what/how they manage"



This desire on the part of children presents an opportunity for technology companies to help facilitate conversations about age-appropriate online activity between parents and children. By continuing to develop new educational and functional tools, companies can encourage parents and children to collaboratively engage in the age assurance process.

Parents Lead the Way

"My worries have increased over the years as there seems to be little policing of content by providers. I hope that I am doing enough, but fear that I am not."

Mother of 13- to 17-year-old, US

PARENTS IN THE DRIVER'S SEAT

Parents believe they bear the most responsibility for managing online safety, and they want to play a highly active role (Figure XV).

At the same time, there are differences in the way they approach this in practice, with French parents taking a more hands-off approach. For example, 30% of US parents and 25% of UK parents use software to block or monitor content, versus 13% of French parents. And 12% of French parents report not taking any action to manage their children's online activity, compared to 7% in the UK and 5% in the US.

INDUSTRY AND REGULATORY EFFORTS ARE WELCOME...

While parents ultimately want control and see themselves as primarily responsible for managing age-appropriate content, they still seek help from industry partners. Parents want to know their efforts are being backed by technology companies, to ensure their children are as safe as possible online (Figure XV).

"They [industry companies] are also responsible because they are the ones who give the rules. They have a very important role to play."

Father of 13- to 17-year-old, France

While parents feel companies hold the highest onus next to their own personal responsibility (Figure XV), they tend to also envision some type of involvement from regulatory leaders. Qualitative responses presented differing views on parents' ideal level of involvement from government, a topic that was most polarized in the US.

"I don't think they [governments] should get involved in a private business."

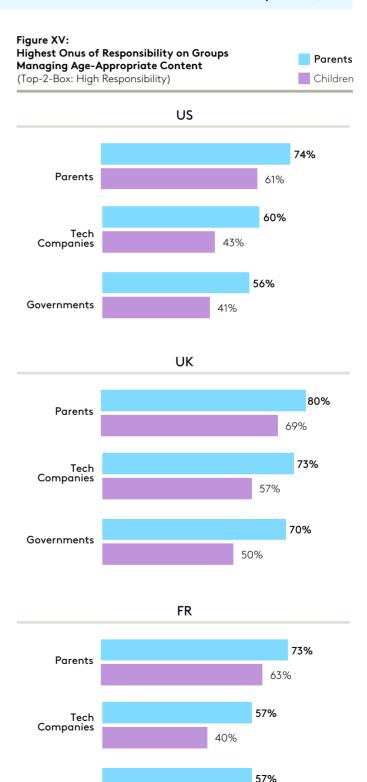
Father of 13- to 17-year-old, US

Others do see a role for governments to play, but as secondary and more complementary to efforts by companies.

"The government needs to play more of a role and ensure legislation for these platforms is more strict around verification and age-appropriate content and perhaps place hefty fines on these platforms that do not comply."

Mother of 9- to 12-year-old, UK

Governments



42%



"My worries have increased over the years as there seems to be little policing of content by providers. I hope that I am doing enough, but fear that I am not."

Mother of 13- to 17-year-old, US

...BUT THERE IS AN OPPORTUNITY TO DO MORE

While companies hold a high level of responsibility for ensuring their platforms are safe by enforcing minimum age requirements, they are equally tasked with minimizing data and preserving privacy.

These competing priorities are a balancing act for technology companies, as it can be difficult to assure age with a high degree of accuracy without also collecting personal information. As a result, parents can feel left in the dark about how age assurance impacts their children's privacy, and they desire more clarity on how data is being used to determine age.

"That's the thing. I don't necessarily know how my child's data will be used. I don't always know what information/ access they've made available and there's not a great way to find that out, without going into the app permission data on their phone for each one."

Father of 13- to 17-year-old, US

Few parents perceive current approaches from industry companies or regulators to be entirely satisfactory. Parents see significant opportunity for both companies and governments to be more proactively involved in protecting children online (Figure XVI).

Based on this study's qualitative exploration, parents are generally open and willing to share their children's age with companies by providing their date of birth. They also feel fairly trusting of companies' intent to protect age data. However, responses also illuminate that few understand or can articulate exactly how their child's data is collected, used, or stored.

Uncertainty about data privacy practices may affect the willingness of some to actively or enthusiastically take part in certain age assurance methods.

Figure XVI: % of Parents That Believe Industry and Government Should be More Involved in Protecting Children Online







Government



"I think being very transparent about what the application would be using my child's age for. I wish the apps would do a better job of actually communicating what the age verification would be for."

Mother of 9- to 12-year-old, US

Age Assurance Deep Dive: Evaluating Current and Prospective Methods



Awareness of age assurance and the preference to use one method over another is generally low among parents and children. Certain mechanisms show promise for balancing the trade-offs between efficacy and invasiveness, whereas other methods are deemed too invasive or not effective enough.



Awareness of Methods

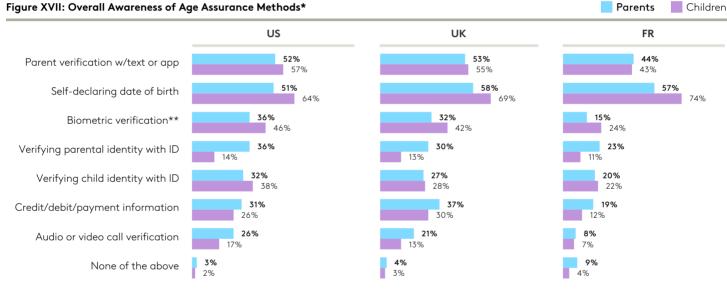
AWARENESS OF RUDIMENTARY AGE GATING MECHANISMS IS HIGHEST

Self-declaration of date of birth and parental verification via text or app are the most recognized forms of age assurance overall among both parents and children.

Children report a higher overall level of awareness of these age assurance methods than their parents, in some cases by wide margins. For example, children's awareness of self-declaration of date of birth exceeds parents' awareness by 13 percentage points in the US, 11 percentage points in the UK, and 17 percentage points in France.

Children also report awareness of the potential to use any type of biometric data (e.g., facial or fingerprint scanning) for age verification and verifying the child's identity with an ID at higher levels than parents.

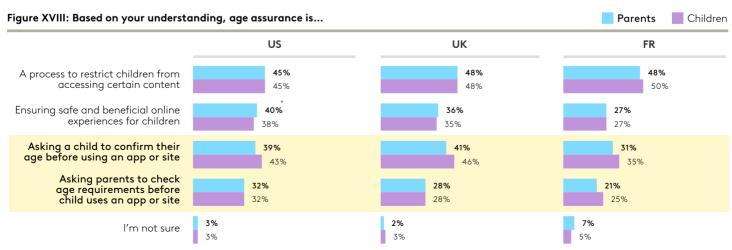
Parents, on the other hand, report being more aware of methods that require their personal involvement to verify their child's age, such as using the parent's own ID or supplying their personal financial information.



^{*}See detailed methodology in Appendix for full definitions of each age assurance method

As children tend to be more aware of rudimentary forms of age assurance, such as self-declaration, it is clear that age assurance is used and viewed more as a process directed toward children, rather than only at parents.

Despite parents reporting that they feel they have the greatest responsibility to make sure their children engage with age-appropriate content, their responses show that they also still associate age assurance with children being the ones to confirm their age.



^{**}Biometric verification was broadly posed as any type of biometric technology applied to age assurance, including facial or fingerprint scanning

Perceptions of Age Requirements

PERCEPTIONS OF AGE MINIMUMS VARY

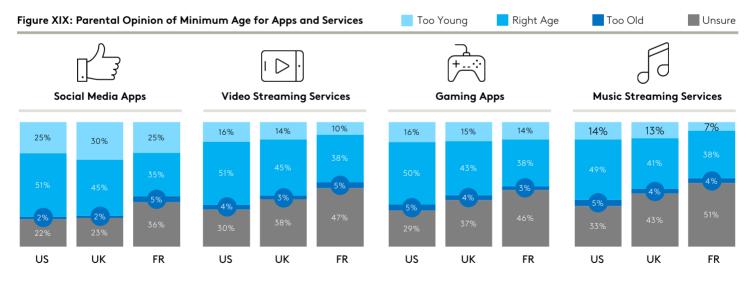
Findings reveal a variety of attitudes and a degree of uncertainty among some parents as to the appropriateness of prevailing age requirements, depending on the type of service and geographic market. For example, nearly half of French parents were unsure about the appropriateness of age requirements for leading television and movie video streaming services, and lack an opinion on whether they are deemed too lax ("too young") or too stringent ("too old"). One third to one half of parents (depending on the country) reported being unsure as to whether ages are set appropriately or "just right" for music streaming services (Figure XIX).

US PARENTS MOST AT EASE WITH MINIMUMS

In general, US parents were most likely to view prevailing minimum ages for social media, video and music streaming services, and gaming apps as set appropriately. Roughly half of US parents (51%) agree that ages across these services are set at the right age. French parents were the least likely to say the same, with fewer than 4 in 10 agreeing that minimum ages were set appropriately across apps and online services (Figure XIX). This could at least be partially explained by differences in the age of consent, which is 15 in France, compared to 13 in the US and UK.

Many parents simply report being unsure if ages are set appropriately, especially for services that they may be less prone to engage in themselves. For example, a sizable share of parents (33% in the US, 43% in the UK, and 51% in France) report being unsure if age minimums are set appropriately for music streaming services (Figure XIX).

Across countries, few view these age minimums are too restrictive - or set "too old." When looking only at those that selected either "too young" or "too old" parents lean closer to believing age minimums should be raised rather than lowered (Figure XIX). While this is true of all countries, it is notable to see this pattern continue in France, as the age of consent is already two years higher than in the US and UK.



SOCIAL MEDIA MINIMUMS QUESTIONED MORE STRONGLY THAN OTHER SERVICES

Across services examined, social media gives parents the greatest pause regarding age requirements. 25% of parents in the US and France and 30% in the UK feel that the minimum ages for social media platforms skew "too young" (Figure XIX).

"They can say they are older than what they are. My 9-year-old is not supposed to use [video sharing apps] but I allow her to have a private account so she can make her own [videos] and practice editing."

Mother of 9- to 12-year-old, UK

"Social media can be a brutal access point to a wave of really nasty bullying. My kids haven't had problems with it, but I see the potential."

Mother of 13- to 17-year-old, US

Exploring Preferences

"Parental validation [via text or app] seems to me to be the most appropriate and effective method. Parents can control and prevent if necessary."

Father of 15- to 17-year-old, France

"Should always be parental verification [via app or text] as it is safer for parents to monitor usage and sites they're visiting."

Mother of 9- to 12-year-old, UK

NO CLEAR WINNER

Across age assurance methods, favorability is low, with no single standout method for either parents or children.

However, when asked to choose between a set of options, parental verification via text or app and biometric methods tend to rise to the top for both adults and children.

Looking across these results, adults seem to gravitate toward methods which give them a feeling of being involved, knowing that they themselves are proactively making a decision to keep their children safe, e.g., parental verification via text or app.

Children appreciate methods that grant them a sense of autonomy and can be completed independently without a parent's involvement, such as submitting their own date of birth or a biometric method such as a facial scan (Figure XX).

LOOKING FOR BALANCE

Preference when considering other factors suggests that people look for approaches to age assurance that are effective yet less invasive. For example, age verification via a child's ID is seen as an effective option, but also an invasive one (Figure XXI). The result: it was reported as the least preferred method by parents across all three countries. This is evident in parents leaning toward the preferred use of parental verification via text or app, and children's preference leaning toward the applied use of biometric methods in age assurance settings (Figure XX).

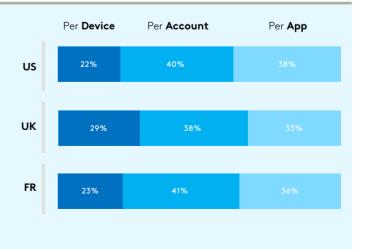
Figure XX: Preference of Age Assurance Methods (Among Those Aware of Each) Children **Parents** US UK FR Child Verification w/ID 15% 15% 15% 12% 9% 12% Biometric Verification* 24% 27% 22% 25% 25% 20% **Parents** identification w/ID 24% 23% 20% 15% 17% 12% **Parent** verification via text or app 27% 22% 32% 28% 21% 12% Self-declaring date of birth 20% 19% 26% 20% Audio phone or video call 22% 23% 20% 21% 23% Credit/debit card 24% 18% 17% 10%

*Biometric verification was broadly posed as any type of biometric technology applied to age assurance, including facial and fingerprint scanning

Looking toward the future, parents seek a middle ground between efficacy, convenience, and trust in age assurance.

If offered, parents report that their most ideal method for setting age assurance on apps and services would be on a per account basis, meaning the account used to download them from an app store.

Per app and per device age assurance settings follow close behind but are less desired, as per app is likely seen as too restrictive or tedious to grant access. Meanwhile, per device can be seen as not strict or effective enough for assuring age, perhaps due to families often sharing certain devices like tablets or laptops.



Effectiveness and Invasiveness

TRADING OFF EFFECTIVENESS AND INVASIVENESS

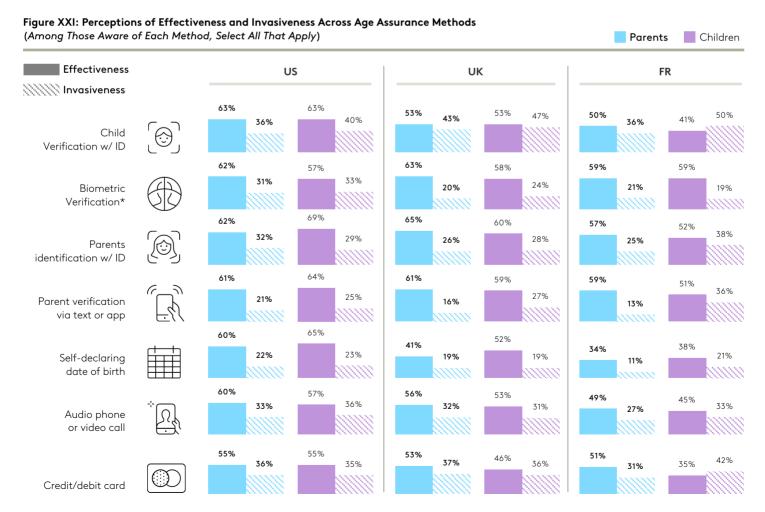
Patterns in data suggest that age assurance methods that are viewed as more invasive, including verifying a child's identity with an ID or supplying financial information as part of parental verification, are viewed as more effective. This suggests a desire for people to find balance, and willingness to allow a greater degree of invasiveness if a method is seen as more effective.

Verifying a child's age with their ID is considered the most effective method, but also the most invasive. It is seen as more invasive than the potential use of biometric methods for age assurance, which includes those in use today like facial scanning. Parental verification via text or app seems to strike a happy medium.

However, perceptions of invasiveness differ across countries. US parents tend to see the broad application of biometric methods in age assurance settings (including facial scanning) as more invasive than their counterparts in France and the UK.

IMPORTANCE OF SECURE WAYS OF COLLECTING INFORMATION

The tradeoff of invasiveness for effectiveness is made on the understanding that users are not sacrificing online safety or privacy. It is paramount to participants that methods of collecting personal information are secure, and that supplying it does not put parents or children at risk.



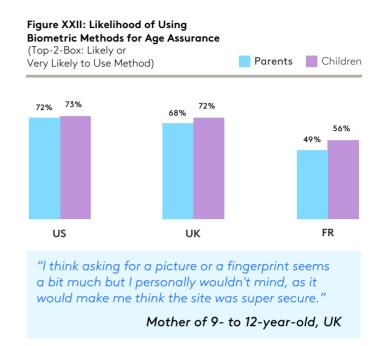
^{*}Biometric verification was broadly posed as any type of biometric technology applied to age assurance, including facial and fingerprint scanning

Exploring the Potential of Biometrics for Age Assurance

In this study, reactions from parents tend to indicate that they are open to using age assurance solutions that may include a biometric component.

Parents and children report that they are likely to use biometrics for age assurance when broadly posed as the applied use of biometric technology (Figure XXII). This includes solutions like facial scanning, which is one of the components of age estimation, a method that is currently in use that does not require a connection to identity or personal information. It also includes emerging or potential solutions that could involve fingerprint or eye scanning in an age assurance setting, although it is worth noting that these biometric methods would be based on an identity check.

While most participants show receptivity to using biometric methods, there are still some mental roadblocks that prevail. There is a clear lack of understanding around using these technologies for age assurance, and only once answering additional context questions do parents acknowledge that it is already common to use biometrics in the broader world of online safety and privacy for instances of identity verification, such as unlocking a device.



Qualitative reflections show that connecting the dots between these existing and accepted uses of biometrics for functions like device access could lead to greater comfort levels in using biometrics for age assurance. Positive reception is often based on the level of ease and convenience, as well as prior knowledge and familiarity.

["What are your thoughts on using biometrics to assess a user's age?"]: "I feel like the biometric screening [for age assurance] is very personal. This leaves me feeling nervous and strange...."

["You mention you have used the facial recognition feature on your phone before. What are your thoughts on using it to assess a user's age?"]: "It's funny now that you mention it, I do use an iPhone with facial recognition. I never really thought about it in comparison to the biometric [age] screening. I will say it took me some time to be okay with using the facial recognition feature. This could be the same nervousness I felt initially."

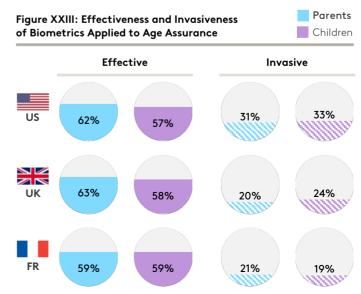
Mother of 9- to 12-year-old, US

VIEWS ON BIOMETRIC EFFICACY

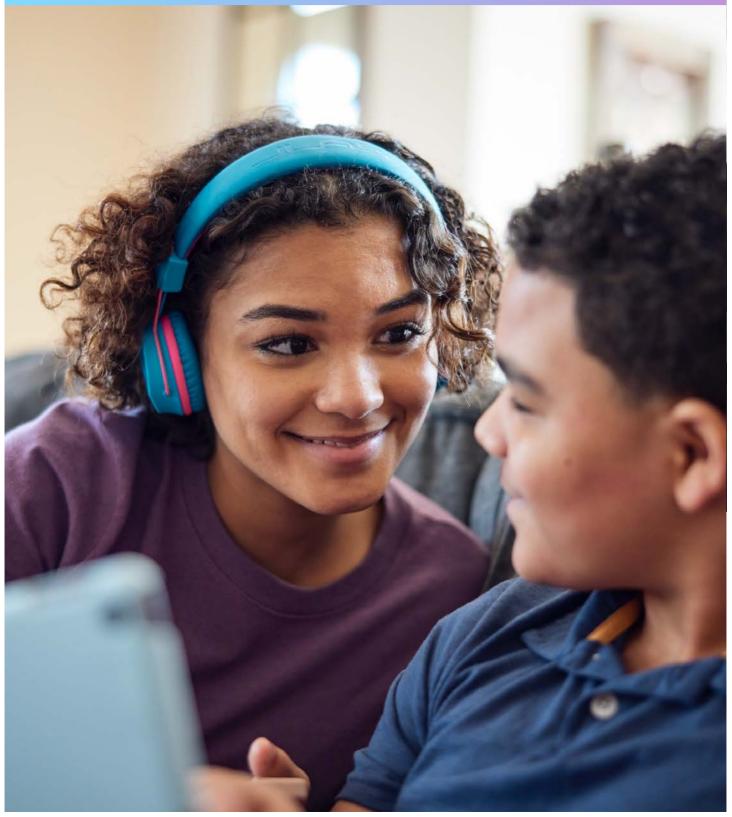
Most parents and children see the applied use of biometrics in age assurance methods as effective.

Nearly two-thirds of parents and children across all countries view the use of biometrics (including current and potential future uses) as an effective tool in assessing age, and US and UK parents appear to see biometrics as slightly more effective than children (Figure XXIII).

Despite hypotheses that users might avoid using methods with a biometric element due to privacy concerns, this method is seen as less invasive than some others such as child verification with ID, or parental verification using a credit/debit card or an audio/video call (Figure XXI).



Paving the way forward



Paving the way forward, together

Age assurance is a complex area for everyone involved. Currently, there is no 'silver bullet' method that ensures children access age-appropriate content, and no perfect balance between invasiveness with effectiveness. However, there is a clear opportunity to make progress if we continue to develop both robust technical solutions as well as a deep understanding of the attitudes and priorities of the parents and children that age assurance directly impacts. With this in mind, priorities emerge for a path forward.

EDUCATE AND EMPOWER USERS

To make an informed decision about participating in methods of age assurance, parents and children must both be clear about the purpose of determining a user's age, how the process works, and what the benefits are. Empowering users with this knowledge is critical to cultivating stronger support and adoption of age assurance efforts.

ELEVATE THE VOICE OF CHILDREN

Children's perspectives must be included in the design and implementation of age assurance methods that will influence the way they interact with the online world. This is particularly true as they grow older and become independent facilitators of their digital lives.

ADDRESS TENSIONS, COMPETING NEEDS

Findings from this study illuminate the way that people view the balance between effectiveness and invasiveness, as well as the importance of preserving safety and privacy in any approach to age assurance. Solutions must also be convenient, reliable, and transparent. Technology companies and regulators will serve people best when solutions are able to address the tensions and sometimes competing needs people experience around this topic.

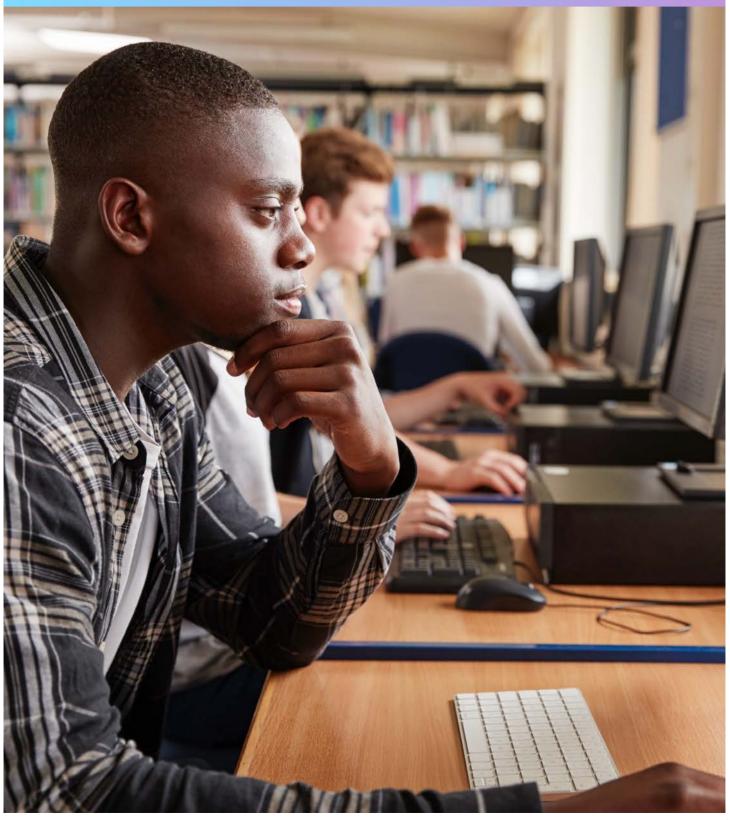
COLLABORATE AND PREPARE FOR THE FUTURE

Government should collaborate with industry and other partners to address current challenges and enhance online safety. It should also work with partners to set a long-term vision for the future of age assurance that acknowledges that the evolution of future technologies will create both new opportunities and new challenges to collectively address.

With enthusiastic participation from industry, government, the policy community and parents, we can achieve age assurance solutions that center on education, transparency, and trust.



Appendix



Methodology

Additional Detailed Methodology



INTRODUCTION

This study was conducted by Kantar on behalf of the Family Online Safety Institute (FOSI). The study examines parents and children among three target countries: the United States, the United Kingdom, and France.

SAMPLE DEFINITION & SPECS

"Parents" broadly describe the child's primary caretaker, defined as either the parent of a child, or the child's legal guardian.

The Qualitative study surveyed parents of and children ages 9-17, with an even split among "tween" and "teen" age breaks. "Tweens" are considered those aged 9-12 in the US and UK, and those aged 10-14 in France. "Teens" are considered 13-17 in the US and UK, and 15-17 in France. N=37 parents and N=34 children participated in the Qualitative discussion.

In the Quantitative study, age breaks slightly differ. Parents and their children ages 13-17 were surveyed across all three countries. Age breaks were roughly split among "Younger children" considered 13-15-year-olds and older children, considered 16-17-year-olds. Younger and older children age breaks were split evenly the US and France, while the same breaks were fielded at a 55% (among 13-15) and 45% (16-17-year-old) split in the UK. To qualify for the main quantitative survey, a respondent must have been a parent of a child aged 13-17.

Age breaks in both the Qualitative and Quantitative phases were selected based on the age of digital consent, which is 13 in the US and UK, and 15 in France.

In addition to screening for age of the child, specifications for parents and children in the Qualitative and Quantitative include:

- Parent: primary or shared decision-making role when it comes to their child's technology usage
- Child lives in parent household full-time
- Have high speed Internet at home
- Parents allow screen time
- Even split of gender within age breaks
- Mix of household types (single child/multi-child, dual-working parent/single-working parent, single parent/multi-parent)
- Mix of socio-economic levels

DATA COLLECTION & FIELDING

Kantar fielded the 3-day online qualitative journal study from July 12 – July 29th. Responses were partially masked, ensuring participants could not view other responses until responding themselves.

The online quantitative survey was soft launched August 26, September 1, and September 6 in the US, UK, and France, respectively. The survey was fully launched 1-2 business days later in each country.

DETAILED QUESTION INFORMATION

Full List of Age Assurance Methods in Awareness, Preference, Effectiveness, Invasiveness

- 1. Self-declaring / entering date of birth
- 2. Verifying with a child's ID / uploading child's documents (e.g. passport, driving license, school ID, etc.)
- 3. Parent verification via text or app (e.g. form, text verification, app push notification to approve)
- 4. Biometric verification (e.g. fingerprints or facial scans)*
- 5. Credit/debit card or other financial information
- 6. Audio phone or video call verification
- 7. Verifying parental identity against a form of government-issued ID

*When posed more specifically about the future likelihood to use any type of biometric means for age assurance, respondents also saw "facial scans, fingerprints, and eye or iris recognition."

