



Safeguarding Children Online:

*A service-specific view on risks
and parental attitudes*

October 2023



Acknowledgments

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The surveys and interviews included in this report were conducted in partnership with the global survey firm Geopoll.

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Any errors remain the authors' alone.



NETFLIX

Foreword

Julia Davidson, OBE, PhD.

PROFESSOR OF CRIMINOLOGY, DIRECTOR OF THE INSTITUTE FOR CONNECTED COMMUNITIES, UNIVERSITY OF EAST LONDON.



This generation of children and young people are the most connected, and future generations will connect in ways that we can only imagine. Parents are the guardians of childhood and have long played a central role in safeguarding their children. But as each generation becomes increasingly digitally connected and knowledgeable about technology, parents face the challenge of keeping pace with the development of effective, enabling strategies that safeguard their children while encouraging them to learn and benefit from being online.

This timely, extensive research was commissioned by Netflix and authored by TMG to explore the experiences of parents/caregivers and children as they experience the benefits and navigate around the challenges of children's lives online across a range of services, including messaging applications, online games, streaming services, social media, and user-generated content platforms. Nearly 5,000 parents across nine countries responded to the survey. Although the context in which children access different services varies, the findings suggest that parents broadly share the same hopes and fears regarding their children's online behaviors regardless of geographical location. The survey also found that parents have an overwhelmingly positive view of the benefits that being online brings to children. They are, however, concerned regarding risk and the potential for harm with some services, particularly social media and user-generated content platforms, and are especially concerned about potential exposure to harmful content, including pornography, violence, and the potential for grooming. Close alignment was found between some of the views expressed by parents and children regarding these key concerns.

The surveyed parents largely felt responsible for safeguarding their children online, recognizing that effective communication with their children regarding online use is key. Parents' safeguarding strategies varied by online service and included the use of parental controls, education, monitoring, and communication. They largely believe these strategies to be effective but

acknowledge the need for help and support. There was some evidence from children to suggest that they employ a range of protective actions on different online services including, for example, configuring private accounts and declining friend requests from unfamiliar individuals.

Ensuring that children remain happy, healthy, and safe online to maximize opportunities is a responsibility that must be shared as all key stakeholders play a role. This important research can inform educational awareness programs and the efforts of practitioners working directly with children and young people. This research can also inform industry practices in considering how best to guide and support parents in safeguarding children online and in considering safety-by-design practices on a service-specific basis. It is equally important for policy makers to reflect upon these and other findings as they develop, introduce, implement, and monitor online safety legislation.

Overall, this report provides an important reminder of the enormous benefits children gain in interacting with different online services while highlighting key risks and potential harms to avoid. Most importantly, it points to the central role parents play in safeguarding their children online. The report further reinforces the need for a "whole systems" approach to child online safety with parents at the center, supported and enabled by stakeholders from key sectors including industry, education, and policy.

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1 About the report

Children live in a connected world and spend more time online than ever before. From 2008 to 2015, the proportion of 15-year-olds in OECD countries with internet access at home increased from 75 percent to 95 percent.¹ Then, during the pandemic, screen time increased significantly for children globally.²

Extensive research has been conducted to examine the impact of connectivity on children's well-being, media use and attitudes, online harms in the digital world, and the technologies that parents use to protect their children online.³

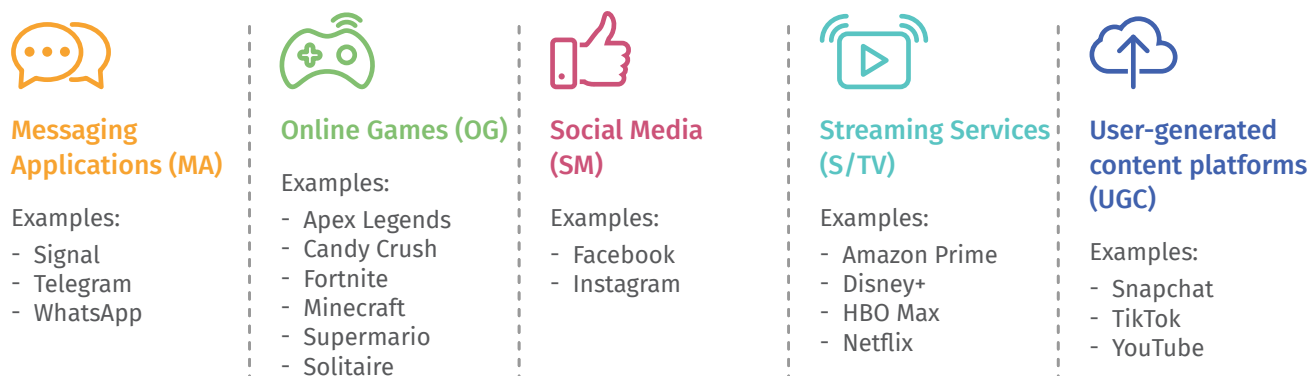
However, an understanding of children's connectivity at a service-specific level is lacking, given the vast ecosystem of applications, websites, and experiences that exist online today. In particular, knowledge gaps remain regarding how children and parents have experienced different online offerings, and what needs and approaches parents may have to safeguard their children online.

To prepare this study, TMG conducted both quantitative and qualitative surveys.

- **Quantitative survey component:** This phase consisted of in-depth interviews examining the knowledge gaps regarding how children and parents experience different online offerings and related online safety strategies used. For the quantitative survey, nearly 5,000 parents were surveyed from nine countries: Brazil, Egypt, France, India, Indonesia, Nigeria, Saudi Arabia, Turkey, and the United States.

- **Qualitative survey component:** This consisted of in-depth interviews conducted with 100 parents and 100 children from five countries: Brazil, India, Nigeria, Saudi Arabia, and the United States. Parents and their children were asked about their perspectives and experiences relating to the five different online services categorized below. This enabled the report to distinguish between the unique features and experiences these services offer children, and how those features and experiences impact children differently.⁴

Figure 1. Five broad categories of online services reviewed in the study



1 OECD, Educating 21st Century Children, (2019), https://www.oecd-ilibrary.org/education/educating-21st-century-children_b7f33425-en.

2 EclinicalMedicine, Changes and correlates of screen time in adults and children during the COVID-19 pandemic: A systematic review and meta-analysis, (2022), <https://pubmed.ncbi.nlm.nih.gov/35615691/>.

3 A parent is defined as an adult who has a child and/or is the legal guardian of a child.

4 The examples included under the different online services are not an exhaustive list and have no relationship with the preferences of end-users. The online games category includes both single player and multiplayer games. The survey covered online games in general and the interviews differentiated between single player and multiplayer online games.

2 Methodological overview

TMG, in partnership with Geopoll, an international survey deployment and data collection firm, conducted a quantitative online survey in nine countries and in-depth qualitative interviews in five countries.⁵

Carried out from April to July 2023, the surveys and interviews were designed to deepen understanding of the following issues/questions:

- What do parents think about their children's use of online services? How do parents perceive the benefits, opportunities, concerns, and negative experiences that these services offer their children?
- What do children experience when they use different online services? What are the benefits and risks different online services pose to children?

- What role do parents play in ensuring that children are protected online? How do parenting styles and the approaches parents use to protect their children differ by online service?

One point to generally note is that, as with any survey, parents' responses could be affected by social desirability bias.⁶ Further detail on the methodology, assumptions, limitations, and safeguards used for this research is provided in Annex B to this report.

Table 1. Overview of quantitative and qualitative phases

Quantitative phase:

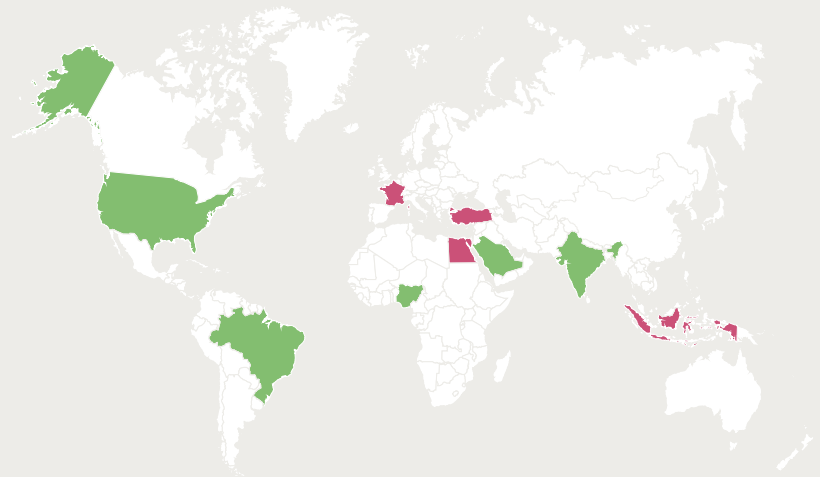
Online survey

TMG and Geopoll conducted an online survey from April 16-May 8, 2023, with parents with children ages 5-17 to collect cross-sectional data. In total, 4,971 parents participated in the survey.

Qualitative phase:

In-depth online interviews

Based on the online survey results, TMG and Geopoll conducted 100 in-depth online interviews from July 6-28, 2023, with children and parents, to deepen understanding of the quantitative data.



Quantitative and qualitative countries:

Brazil, India, Nigeria, Saudi Arabia (KSA), United States (U.S.)

Quantitative only countries:

Egypt, France, Indonesia, Turkey

⁵ The nine countries for the quantitative survey are Brazil, Egypt, France, India, Indonesia, Nigeria, Saudi Arabia, Turkey, and the United States and the five countries for the qualitative survey are Brazil, India, Nigeria, Saudi Arabia, and the United States.

⁶ This type of response bias occurs in surveys when respondents answer questions in ways that are likely to please societal expectations or that they think are acceptable.

3 Executive summary

In the study, parents showed different levels of risk perception and concern based on the type of service, and correspondingly deployed different parenting styles to manage their children's use of each service type.⁷

These can be summarized as follows:

- Parents broadly have a positive view of their children's use of technology, **particularly as a means of achieving success and learning.**
- Alongside the benefits, parents have concerns about children's online engagement, particularly around **content (e.g., extreme violence, pornography, misinformation, and age-inappropriateness), negative influences online, and communications with strangers.** Some of these concerns also vary based on the age of the children.
- Not all risks are perceived equally. Parents are **more comfortable with their children using streaming services, online games, and messaging applications than with social media and user-generated content platforms.**
- Differing comfort levels may relate to specific features unique to particular services. Parents **consistently highlighted concerns with user-generated uploads and user-to-user communication.** Some parents are also **more comfortable with services that involve payment than with free ones.**
- **Differentiated concerns lead parents to adopt different strategies to manage their children online, based on the service.** Parents found their strategies to be largely effective and generally believe they have primary responsibility for managing their children's online experiences. At the same time, parents did report that there are some areas they might need help with, based on the service.
- Like parents, children have concerns in particular about strangers and undesirable content. **They tailor their behavior online depending on the online service.**

⁷ A parenting style is defined as the behavior the parent has toward the child's online safety, including the actions the parent undertakes to protect their child online.

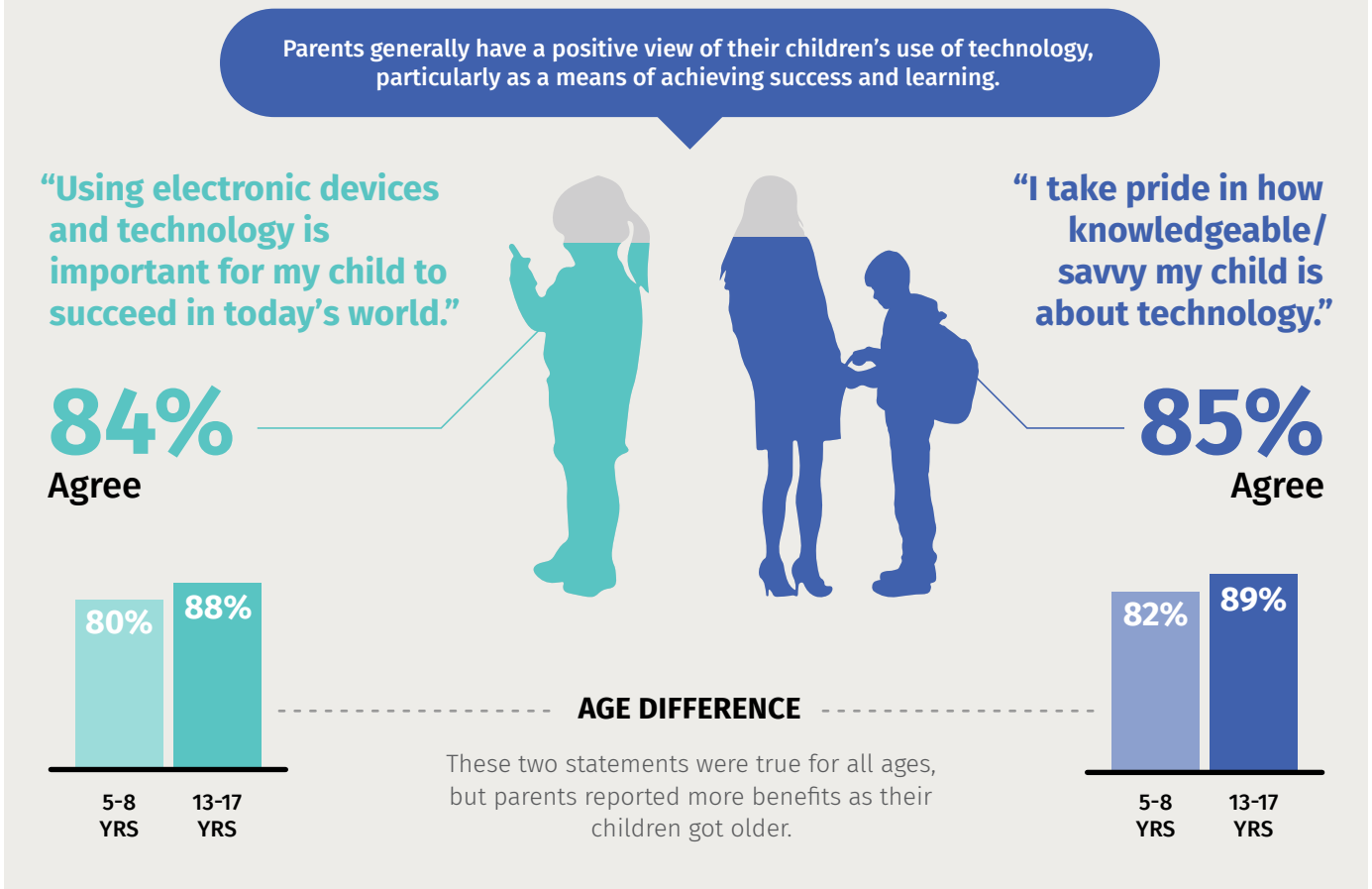
4 Key global trends

4.1 Parents view online services as a means for their children to achieve success and learning

The benefits that technology offers children are widely recognized. According to a UNICEF report,⁸ children engaging in online activities are more interested in educational, informative, and social experiences online that potentially improve their well-being and build their technical and critical capacities, allowing them to benefit from learning new digital skills. TMG's report generally confirms UNICEF's findings.

In the survey, parents widely acknowledged the benefits of internet access for their children with 99.7 percent of the interviewed parents feeling excited about at least one aspect of their children's online use. Nearly half expressed excitement around the potential for their children to learn online. Nearly 85 percent also agreed or strongly agreed that their child's use of devices and technology was important for their success and were proud that their child was technologically savvy. These perceived benefits increased slightly as their children got older.

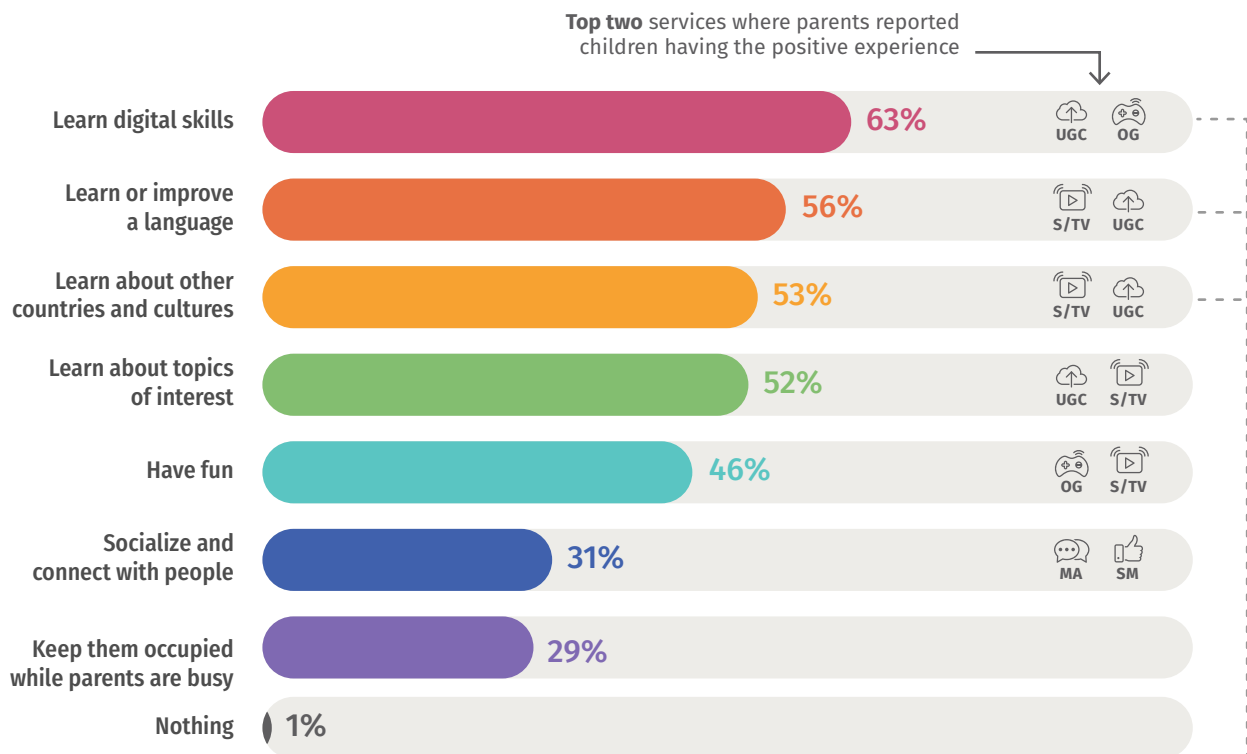
Figure 3. Parent's general perception about their children's use of technology (% of parents)



The study also found that the **types of positive experiences children have differ depending on the service**. Parents perceived that their children used **user-generated content platforms and streaming services more commonly than other services to improve their language skills, gain exposure to other cultures, and learn about interesting topics**. Parents focused more on

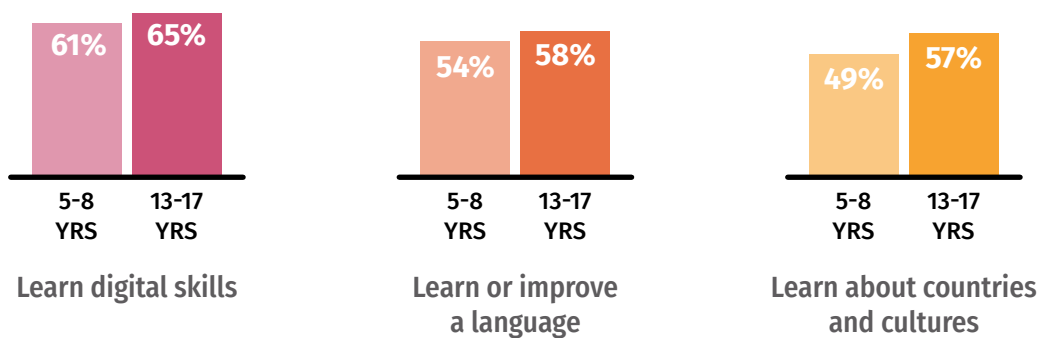
the entertainment element provided for their children with online games, and viewed messaging applications and social media to be where children mostly connect and socialize with others.

Figure 4. Technology and its benefits for children according to parents (% of parents)



AGE DIFFERENCE

The top three benefits that parents perceive from their children's use of technology increased as the children got older.



On the benefits of user-generated content platforms and streaming services

“ Learning to count, both in Portuguese and in English, she learned it all by watching videos on YouTube.”

– Parent of a 6-year-old girl, Brazil.

“ He watches foreign movies to develop the language; he listens to the movies carefully even without subtitling. He also gathers the family to watch a movie together [on streaming].”

– Parent of a 14-year-old boy, KSA.

“ I find value in certain do-it-yourself (DIY) videos, and it’s beneficial for her as well, especially when it comes to her interests in crafts, artwork, and drawing. She often watches [UGC] videos that demonstrate various drawing techniques and tries to replicate them, as drawing is one of her keen interests.”

– Parent of an 8-year-old girl, U.S.

On the benefits of online games, messaging applications and social media

“ That is for their entertainment. They use it for only using their free time either in single or multiplayer [online games].”

– Parent of a 12-year-old boy, India.

“ It’s necessary to use social media at school; he communicates with his friends for homework and duties. He contacts friends and family via social media, it’s a must.”

– Parent of a 16-year-old boy, KSA.

“ It [messaging applications] helps in his spellings, helps in his communicating with friends who are far from him and he cannot see them presently, at least with the video calls too, he can be able to see them”

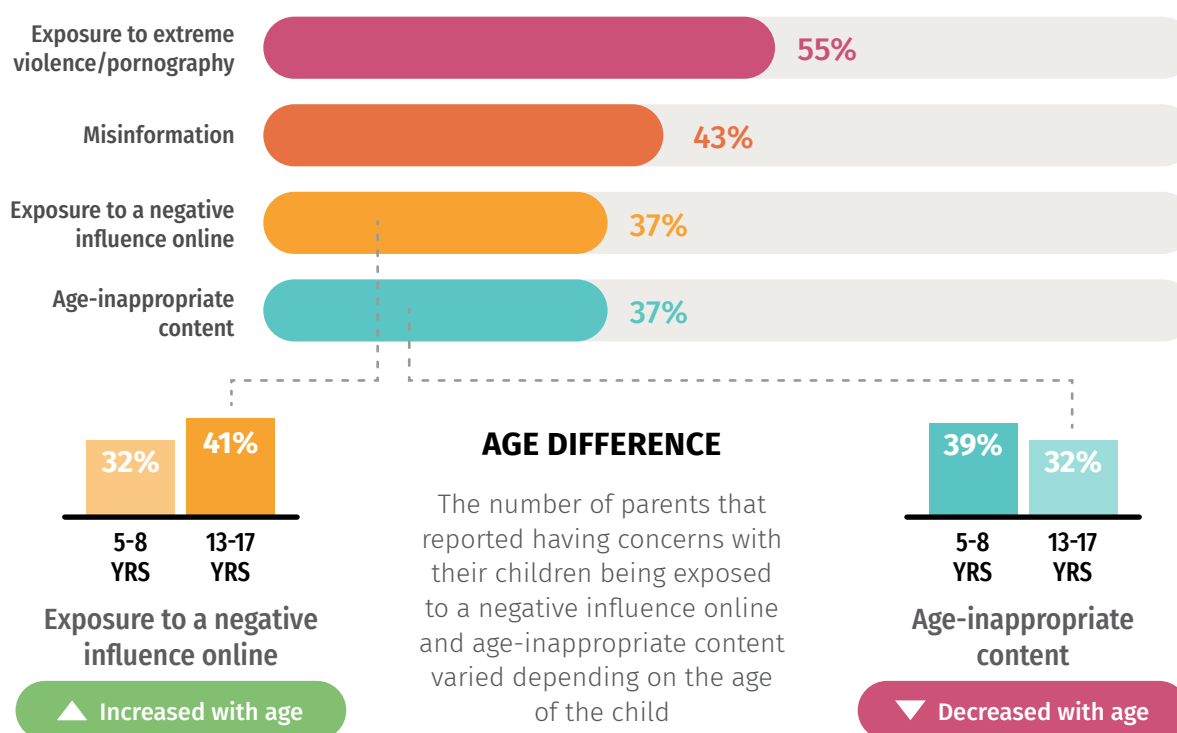
– Parent of a 10-year-old boy, Nigeria.

4.2 Parents are mostly concerned about extreme content, misinformation, exposure to negative influences online, and age-inappropriate content

In addition to recognizing the numerous benefits of children's online experiences, nearly all parents also expressed concerns. Parents were most commonly concerned with their children being **exposed to extreme violence or pornography (54.5 percent), misinformation/manipulative content (42.9 percent), exposure to a negative influence online (36.5 percent), and age-inappropriate content (36.5 percent).**⁹ Other common concerns expressed during the interviews included **the possibility of their children communicating and sharing personal information with strangers, learning inappropriate language, or being cyberbullied.**

Some of the parents' concerns varied depending on the age of their children and the type of service. For example, **parents became more concerned with their children being exposed to negative influences online as the children got older.** While 32 percent of parents with children ages 5 to 8 reported having this concern, this percentage increased to 41 percent for parents with children ages 13 to 17. **In contrast, concerns with their children being exposed to age-inappropriate content decreased as the children got older.** Whereas 39 percent of parents with children ages 5 to 8 reported being worried about age-inappropriate content exposure, the percentage fell to 32 percent for parents with children ages 13 to 17.

Figure 5. Parents' top four concerns about their child's online activities (% of parents)



⁹ The survey referred to pornographic content in general; it did not differentiate between adult pornography and child sexual abuse material (CSAM) or if the pornographic content was user-generated or not. The same applied for the in-depth interviews.

How age-inappropriate content is described differs by online service

Age-inappropriate content is a broad term that means different things for different parents, depending on culture, personal preference and crucially depending on the online service. During interviews, parents' reported that the type of age-inappropriate content to which their children were exposed varied depending on whether they were talking about UGC, social media, or streaming services.



Age-inappropriate content on UGC and social media

On UGC and social media, parents referenced more extreme content related to explicit sexual content, self-harm content, and excessive violence, including animal torture.

“ *Extreme violence, maybe from TikTok. Pornography too, from TikTok and maybe WhatsApp. A movie rated higher than his age, maybe from television or Netflix, content depicting or encouraging self-harm maybe from TikTok and YouTube.”*

– Parent of a 14-year-old boy, Brazil.



Age-inappropriate content on streaming services

On streaming services, parents related more commonly to TV shows and films that were meant for more mature audiences that involved nudity, violence, alcohol, or smoking.

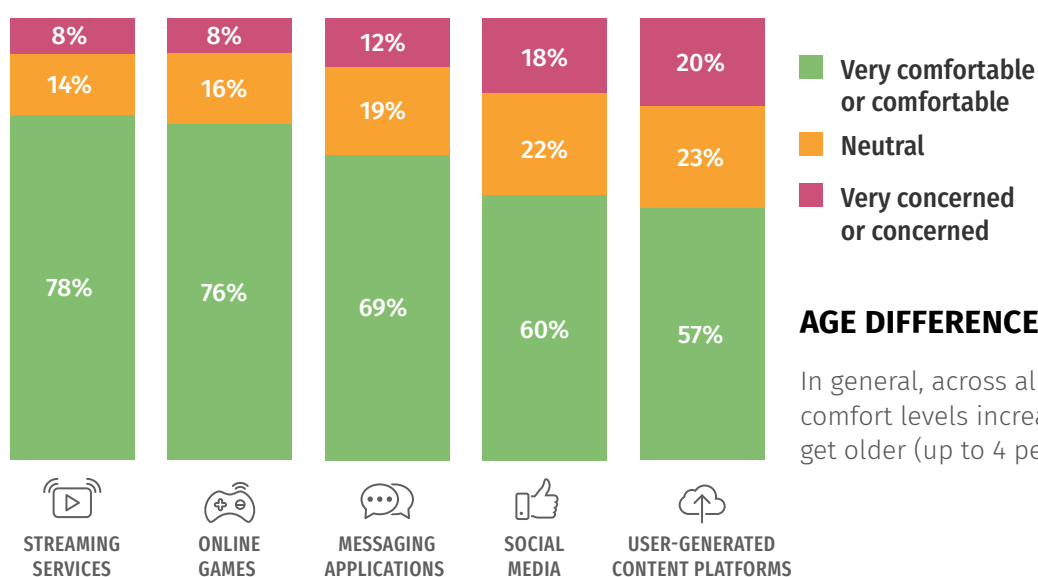
“ *It is about the nudity scene in the movie and the OTT platforms I mentioned where not pornography level but to some extent it is related content where we need to take care.”*

– Parent of a 17-year-old girl, India.

4.3 Not all risks are perceived equally; parents are more comfortable with streaming, online games, and messaging applications

Parental concerns varied by service. In response to the survey, about **8 out of every 10 parents stated that they were very comfortable or comfortable with their children using streaming services or online games.** This number dropped to 7 out of 10 parents for messaging applications and fell even further for social media and user-generated content platforms, with only 6 out of 10 parents stating that they were comfortable with their children using these services.¹⁰

Figure 6. Parents' comfort levels by online service (% of parents)



On comfort with streaming services, online games, and messaging applications

“Paid TV shows and movie streaming service. I am very comfortable because whatever he is watching like cartoons or otherwise, he is watching in front of us, therefore I feel he is sitting at the safe place and good place and under 12 age content he is watching and learning something new as well as such services are giving him entertainment at the same time.”

– Parent of a 12-year-old boy, India.

“I think after a while it was, especially with the games after seeing that she was playing them for a while and nothing bad was happening. There was no random communications with people we didn't know or anything like, okay, she knows her way around this. She knows how to turn down in case she was invited to anything. So it's okay. It's just, I guess building trust.”

– Parent of a 11-year-old girl, U.S.

“More comfortable is with WhatsApp, even though I don't like it... It's just people that he knows, and I was very resistant to it at first...”

– Parent of a 10-year-old boy, Brazil.

¹⁰ In general, across all the services, comfort levels increased slightly as children got older (up to 4 percentage points). For UGC, the increase was more significant: very comfortable or comfortable: Age 5-8: 53.2% / Age 13-17: 63.0%.

On comfort with social media and user-generated content platforms

“ [T]he one that I am not comfortable with is YouTube. You know with YouTube you have so many videos that children are not supposed to watch so I don't really allow her to do that. I am always there, once I am watching, if she sees something interesting she says 'Mummy, this one is interesting, can we watch this?' So I will now check the content and I will be like, okay we can watch it. If it is something that she can't watch, I will tell her 'No, you are just a child, you can't watch this.'”

– Parent of a 12-year-old girl, Nigeria.

“ [S]ome social media platforms expose your kid to inappropriate content that is not suitable for us.”

– Parent of a 14-year-old boy, KSA.

4.4 Parents are most concerned with user-generated uploads and user-to-user communication, and most comfortable with paid services

Specific features of the different services can shape parents' perceptions about risks. In the qualitative study, **two features consistently created particular concern for parents and sometimes materialized in negative experiences for children: user-uploaded content and user-to-user communications. Services that involved these features were perceived as riskier by parents than other services without these features.** For example, parents often stated that their children have watched content that included extreme violence and self-harm in user-generated content platforms. They also reported instances where their children were bullied, exposed to inappropriate language, or asked to share their personal data in services where they could communicate with other users, including in online multiplayer games and social media.

On concerns with user-generated uploads

“ On YouTube you have access to violent stuff and even pornography. Looks like it's not censored, got it? It's all open, and lately it's been getting more open. It's a harm, they start to get in touch with these things too early.”

– Parent of an 8-year-old boy, Brazil.

“ On YouTube also Google has controlled the language but still people upload anything so control should be there from government's end where they should remove videos having such language.”

– Parent of a 17-year-old girl, India.

“ There is no censorship, applications [on UGC] are open to all ages and there are no specific ages, challenges that are not censored”

– Parent of a 10-year-old boy, KSA.

On concerns with user-to-user communication

“ I just told her as a parent what every reasonable parent should do. I am like; social media is not real life. You can even see an old man of 70 years claiming to be a teenager just to lure you so you don't talk to strangers. Do not meet strangers; do not meet strangers you meet on social media.”

– Parent of a 16-year-old girl, Nigeria.

“ [T]he negative aspect is that they might encounter interactions from people who are not necessarily their friends [on social media]. If their accounts are not locked off, these individuals can make derogatory and hurtful comments, which can severely impact the self-esteem of younger kids.”

– Parent of a 15-year-old girl, U.S.

“ I believe that the social media aspect of gaming carries similar concerns, as players can interact, chat, and potentially get to know strangers. When participating in multiplayer games alongside unknown individuals, there's always a risk of encountering someone with malicious intentions. Additionally, some games, particularly combat-oriented ones, may expose children to violence and desensitize them to such content.”

– Parent of a 14-year-old girl, U.S.

Services also varied in terms of whether they provided paid or free offerings, and that was a factor in parents' concerns.¹¹ Testimonials suggest that **where parents must pay to use a service, they felt a greater sense of control over what content their children could access.** This may be related to parents reporting that they could more effectively block inappropriate content and monitor their children's online activities on paid services. Lastly, a parent stated that they felt paid services were more responsible for the content they provided and could be held accountable more easily for any content that could be harmful.

On paid services versus free services

“ So, because it's free for anyone to create a channel and create some sort of activity to post there for free, there's little in the line of filtering.”

– Parent of a 5-year-old girl, Brazil.

“ There is huge difference because free services are for limited time and you have much less control over it, however, paid services involves company policies and you can't share any video and there is control over it, however, when it comes to free services the control on all these are less because they post many videos.”

– Parent of a 17-year-old girl, India.

“ Sometimes, the paid thing is safer when it comes to the kids because they have special channels for the kids, passwords. It is safer. I can control some of the things that could harm my kids.”

– Parent of a 6-year-old girl, KSA.

“ In my opinion, when you're paying for a service, there's a sense of better monitoring and control over the content that is posted there. For instance, platforms like Disney, which are paid services, tend to have stricter content guidelines and moderation. On the other hand, with free services, I feel like the monitoring might not be as thorough or strict, leading to potentially riskier content being available.”

– Parent of a 7-year-old boy, U.S.

11 During qualitative interviews parents were asked about the relationship with comfort levels and paid services.

4.5 Parents use different strategies to manage their children's online activities, depending on the service

Most surveyed parents recognize that they have the primary responsibility for guiding their children's online experience. In the survey, **88 percent of parents stated that they are primarily responsible for managing their children's online experience. Accordingly, parents take proactive steps to protect their children online.** The survey identified eight different strategies that parents use to protect their children, ranging from monitoring to communication and guidance. On average, parents reported that their **top strategies were communications and setting rules for their children's online use.**

The in-depth interviews also **highlighted that parents' strategies vary by service.** Strategies may vary from constant monitoring to blocking certain content or watching the content together with the child.

For example, **for user-generated platforms, social media and messaging applications, parents were more likely to use different kinds of monitoring approaches** to protect their children while using the service. **For online games, parents often reported introducing rules and parental controls** to manage their children's usage. In contrast, **for streaming services, parents reported watching content together with their children and using parental controls, ratings, and advisories.**

“*When it comes to the various platforms or online services he's using, such as TV shows, games, or videos, I do tend to adjust my parenting style accordingly. Different platforms may require different levels of monitoring and guidance, so I try to adapt my approach based on the specific service he's engaging with. It's important to address each platform's unique content and potential impact on him to ensure a balanced and safe digital experience.*”

– Parent of a 7-year-old boy, U.S.

Table 2. Examples of parenting strategy per online service

	ONLINE SERVICE	PARENTING STYLE OR STRATEGIES	QUOTES
More supervision ↑	 Messaging applications	Check the phone contact lists and messages	<i>"On messaging applications, they only have access to people that are already in my contacts list, so I'm always watching if they are sending messages to their aunties, grandmother..."</i> – Parent of a 7-year-old boy, Brazil.
	 Social media	Link profiles to the parents' accounts and supervise posts	<i>"We have each other's accounts. So, I know what she is uploading. And I can open her phone at any time"</i> – Parent of an 11-year-old girl, KSA.
	 User-generated content platforms	Monitor viewing history/linking accounts. Use parental controls such as "kids" profiles	<i>"And I can go to YouTube and look at the history. Make certain she is not looking at weird stuff."</i> – Parent of a 7-year-old girl, U.S. <i>"If she is using YouTube Kids then we can rest assured because the content will be kids related only and not inappropriate content."</i> – Parent of a 7-year-old girl, India.
Less supervision ↓	 Online games	Restrict time and block communications with strangers	<i>"On multiplayer games, as he can chat with people from around the world, we block his microphone so he has as little contact as possible with people and just play."</i> – Parent of an 8-year-old boy, India. <i>"I have to stop him and tell him, it's not that big of a deal if he's done with his homework, but when he becomes really engaged in the game and I have to remind him that it's almost time for bed. Have you finished your homework? He isn't always finished. As a result, he has stay later to complete it."</i> – Parent of a 12-year-old boy, U.S.
	 Streaming services	Watch together with the children. Use parental controls such as "kids" profiles	<i>"[B]ut we all should watch together whether it's in my house, her relatives' houses or at her uncle's house, all should watch the movie together as it's more exciting."</i> – Parent of a 14-year-old girl, KSA. <i>"It is easier to check what she is watching. She has a kids account, so everything she watches is suitable for her age. When we watch something together it is also the same thing."</i> – Parent of a 9-year-old girl, Brazil.

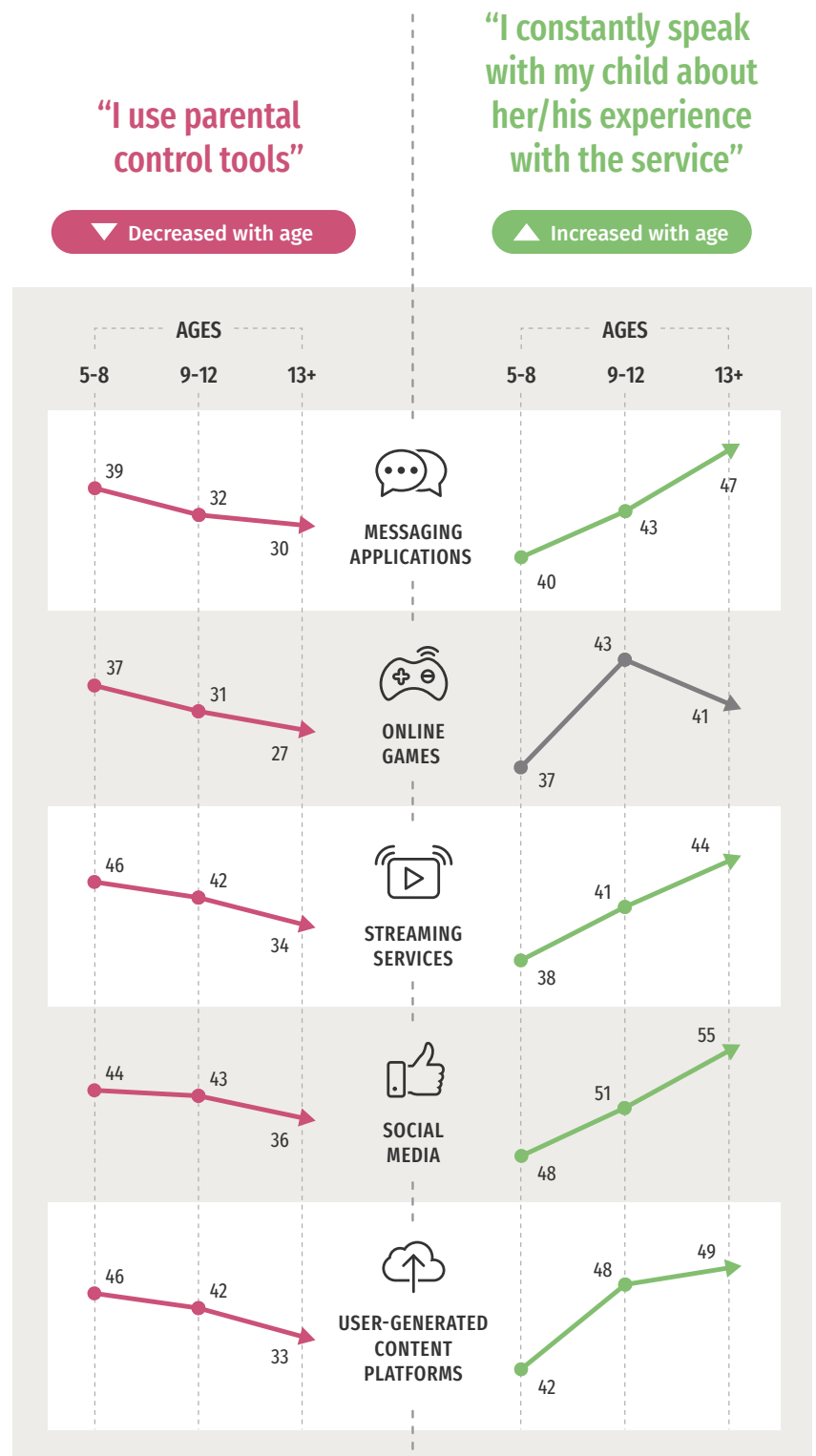
Parents adapt their strategies depending on the age of their child, recognizing that as children get older, online challenges and strategies evolve. Parents of children ages 5 to 8 reported using parental controls more than parents of children 13 and older. Whereas parents with children older than 13 years relied more on speaking with their children about what they should or should not be doing online.



When she was younger, I used to have some restrictions. When she overstepped, I took her liberty away, and I gave it back sometime later. Eventually, she started to be responsible for it. I mean, she already has a mind of her own, so I give her a lot of freedom regarding this."

– Parent of a 17-year-old girl, Brazil.

Figure 7. Use of parental controls and communication strategy by online service by age (% of parents)



While 92 percent of parents consider that their approaches to protecting their children online were effective,¹² parents were also interested in learning about additional tools and strategies to further protect their children and sought support from their children's schools and communities.

On additional tools and help to protect children online

“ Yes, mainly kids implement what they learn in school. Therefore, if they are taught in schools how online fraud can happen and the content should be avoided, an awareness campaign should be there.”

– Parent of an 11-year-old girl, India.

“ I want to be able to navigate her device without her knowledge. If there is such a thing, I could pay for that. I want to know what she is watching and listening to.”

– Parent of a 6-year-old girl, KSA.

“ Only one person cannot take care of a child. At least they need more orientation both in school, in churches, and any social gathering.”

– Parent of a 10-year-old boy, Nigeria.

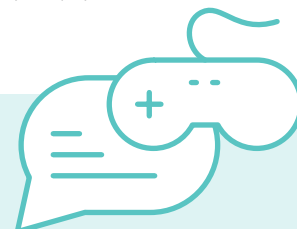
“ I believe there's room for improvement in parental controls and monitoring, making them easier to use and more effective. For instance, it would be beneficial to have a more straightforward way to monitor my child's phone, especially when she's at a sleepover. Being able to track her activities and her friends' activities would be helpful. Overall, I think we can significantly enhance technology related to parental controls and protecting minors.”

– Parent of a 14-year-old girl, U.S.

¹² The high percentage here could be as a result of answering the survey questions in a way that gives the impression that parents are more assertive when protecting their children online than they really are. Although the report findings regarding the effectiveness of parents' strategies align with what other studies have found regarding parental mediation and reduction of online risks, effectiveness is a broad term and quantifying it through a single question could be reductionist. Therefore, future research could explore the question around the effectiveness of parental approaches to protect their children online in more detail and offer further evidence on how and what effectiveness means for parents.

4.6 Like parents, children have concerns about strangers and undesirable content and they tailor their online safety approach depending on the online service

Children interviewed generally had a positive view of their online experiences. In particular they enjoyed being able to chat with their friends, play games, and watch videos.



Children sharing their favorite things online



Play with my friends, chat with them and watch YouTube."

– 10-year-old girl, Brazil.



I love to play Sony PlayStation like FIFA."

– 12-year-old boy, KSA.



Probably chatting with my friends and playing online games."

– 12-year-old boy, U.S.



Watching cartoons and playing games"

– 7-year-old boy, Nigeria.

At the same time, a **significant number of children displayed an awareness of potential risks to their engagement online and noted efforts that they take to avoid them.** Children stated that they exercise caution in particular when engaging with strangers online and avoid sharing personal information, such as addresses, names, and passwords. Some also avoided or urged their friends against watching undesirable content, particularly when it was either frightening or violent.

Children's concerns closely aligned with some of the top concerns reported by parents, including children communicating with strangers and exposure to age-inappropriate content online.¹³



On communicating with strangers and sharing personal information online



[A]voiding talking to the person on the game, because you cannot know if it is an old person. The technologies evolve and nowadays the old people can fake, can pretend they're teenagers."

– 13-year-old girl, Brazil.



[T]hey should look out for people they accept to chat with. Yes, before you even chat with someone you have to accept his request and in case you are not comfortable with someone, you can just block him."

– 17-year-old girl, Nigeria.



But I do advise my friends that communicating with strangers is weird and harmful."

– 17-year-old girl, India.



Do not give out your real name and do not share your password."

– 10-year-old boy, U.S.



Not to chat with strangers, not to share your private information or pictures with any stranger."

– 15-year-old girl, KSA.

¹³ While it is also possible that these concerns genuinely reflect the fears and risks perceptions that children have, alignment between children's responses and parental concerns could be attributed to parents being present during the interviews, which may have influenced the children to share views they believed their parents would endorse.



Addressing undesirable content

“ Don’t watch those things, they are bad. Be careful with videos you watch.”

– 11-year-old boy, Brazil.

“ I don’t watch the video or play the games that are inappropriate.”

– 7-year-old boy, KSA.

“ They shouldn’t download any videos or any films. Like sexy scenes or something like that.”

– 8-year-old girl, Nigeria.

“ Like, not looking up inappropriate things like that [on UGC].”

– 14-year-old girl, U.S.

There was some evidence during the interviews that children, like parents, vary their actions to protect themselves, based on the specific online service they use.

Highlighting social media and user-generated content platforms, such as TikTok and Snapchat, **children mentioned employing tactics, including configuring private accounts and declining friend requests from unfamiliar individuals as safeguard mechanisms.** With online gaming environments, some children shared that they would **mute or avoid using chat functions to prevent getting in touch with strangers or being exposed to inappropriate language.**



On safety with social media and user-generated content platforms

“ And if you are an under-age person, to have a closed profile on social media would help a lot to have more control over your account and to check who’s watching your posts.”

– 17-year-old girl, Brazil.

“ I would advise them to keep your account private and don’t accept requests from random people.”

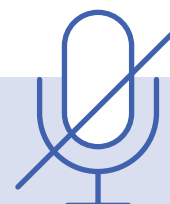
– 17-year-old girl, India.

“ To make your account that has your personal photos private. I don’t post my videos on TikTok to be public if they are private.”

– 16-year-old girl, KSA.

“ I’m not entirely sure, but it’s essential to exercise caution while posting, sharing, searching, and accepting requests online. It’s about being mindful of your actions and choices.”

– 15-year-old boy, U.S.



On safety with online games

“ Bullying via online games with multiplayer. When I discover bullying or people making fun of others I turn the mute option.”

– 14-year-old boy, KSA.

“ Avoid the comments section on multiplayer games, people can insult and be rude.”

– 12-year-old boy, U.S.

“ I don’t talk in the chat of the game that I play. Because there’s like strangers there that I don’t know.”

– 12-year-old boy, U.S.

In the context of user-generated content platforms, such as YouTube, some children stated that they bypassed undesirable content by changing or fast-forwarding through the video. Children did not highlight messaging applications and streaming services as much during this discussion.

A red-outlined rounded rectangle containing the word "Skip" in a pink sans-serif font, followed by a right-pointing triangle icon.

On safety with user-generated content platforms

“ If I find an inappropriate scene or bad content or even a pornography, I’ll skip it at once.”

– 13-year-old boy, KSA.

“ They should report to their parents or they can just delete that video.”

– 12-year-old girl, Nigeria.

“ Yeah, when I’m watching something on my For You Page and it starts becoming sadder or something I don’t like, I take action. I simply search for the content I want to see and watch that. By doing this, my For You Page starts showing more of the content I prefer.”

– 14-year-old girl, U.S.

These adaptive strategies showcase the proactive efforts undertaken by both parents and children to ensure a safer online experience.

Despite general alignment between parents and children, there were instances where children’s reports diverged from those of their parents. **In certain cases, children reported using online services that their parents were not aware of, such as Discord, and they shared negative experiences that had gone unnoticed by their parents, for example incidents in the metaverse and cyberbullying in social media.** These differences could imply that parents may not always have a comprehensive understanding of their children’s online interactions.

5 A deep dive into five online services



5.1 Messaging applications

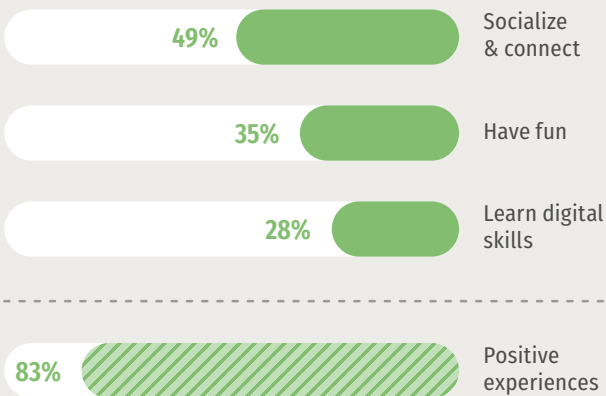
Messaging applications allow children to socialize and connect with others. At the same time, parents perceive certain risks associated with messaging services due to the possibility of sharing content and communicating with strangers. Parents' risk perceptions do not often materialize in actual bad experiences for their children, with less than 23 percent of parents reporting their children having had actual negative experiences with a messaging service. Parents reported feeling in control because they have access to their children's contact list and can check the messages that their children send

and receive. Some parents also highlighted that it is harder for strangers to contact the children in messaging applications than in other online services as whomever wants to communicate with the children needs their telephone number. This lowers the probability that their children will be contacted by strangers. 91 percent of parents reported that their strategies to protect their children on messaging applications were effective.

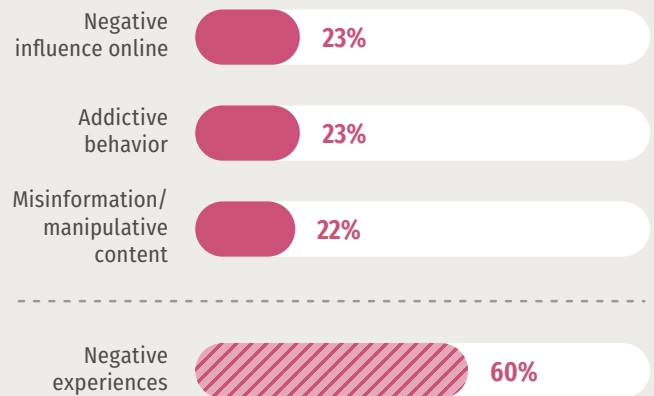
Figure 8. Protecting children using messaging applications, parents' perspectives

MESSAGING APPLICATIONS

Top positive experiences (% of parents)



Top negative experiences (% of parents)



During the interviews, parents also reported some incidents of children communicating with strangers.

“ I believe that chatting can have valuable benefits. It offers a more direct and personal connection, especially for young individuals. (...) Through chatting, they feel connected and find friends, which is essential as sometimes you might feel alone in certain activities.”
– Parent of a 10-year-old boy, U.S.

“ Her mother caught some chat groups on her phone, game related chat groups, and she was talking to strangers. People from other states with cartoon pictures on their profile pictures, we don't know who that might be.”
– Parent of a 13-year-old girl, Brazil.

Risks and related features



Fraud and scams

Some parents worry that their children could become victims of fraud and scams via messages or calls



Sharing content

Sharing pictures with strangers has the potential to put children in vulnerable places



Communicating with strangers

Parents see risks associated with children sharing personal information or being groomed

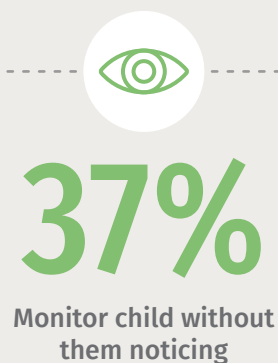
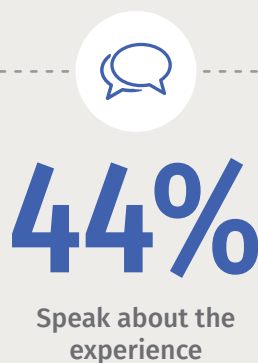
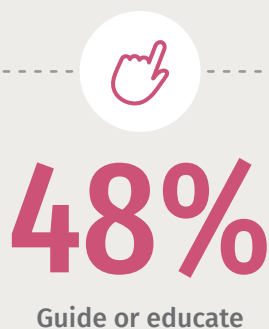


Communication tools

Chatting and calling could be a source of negative experiences for children



Top parental strategies to protect their children online (% of parents)



In the interviews, parents shared additional strategies they used to protect their children when using messaging applications.

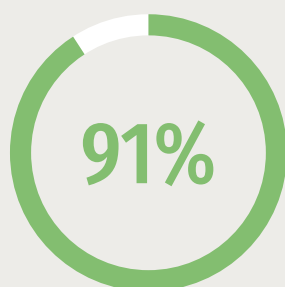
“ On messaging applications they only have access to people that are already in my contacts list, so I’m always watching if they are sending messages to their aunties, grandmother.”
– Parent of a 7-year-old boy, Brazil.

“ I can open the conversations every once in a while to read them”
– Parent of a 10-year-old boy, KSA.

“ I keep on checking her phone and her chat.”
– Parent of a 11-year-old girl, India.

“ Number 1 is that she uses my phone, my number for WhatsApp and I do see what they discuss.”
– Parent of a 8-year-old girl, Nigeria.

Parents reported their strategies were highly effective, but they stated they still need some help to protect their children when using messaging applications.



of parents said their strategies were very effective or effective in protecting their children on messaging applications

“ We want to avoid that on WhatsApp if there is any random message or someone who is unknown or writing ‘hello, I want to be friend’ or something like that, if you know that person then it is fine, otherwise block.”
– Parent of a 17-year-old girl, India.



5.2 Online games

During the interviews, children reported that playing online games was fun and among their favorite online activities. In the survey, parents reported feeling more comfortable with online games than with many other services online. Despite this, interviewed parents reported that their main concern with online games was their children's interaction with strangers, exposure to explicit language, or cyberbullying. These risks were not among the top negative experiences for children highlighted in the quantitative survey, with only 14 percent of parents reporting that their child had communicated with strangers in online games. Similarly, only 13 percent of parents reported that their child was cyberbullied while using the service. The difference in quantitative and qualitative results may be due to the wide variety of online games where not all games are multiplayer

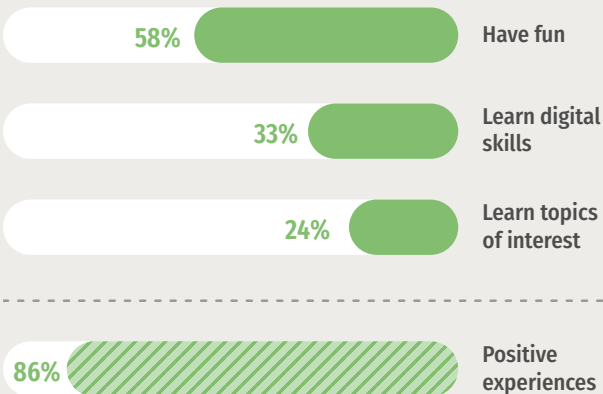
or have user-to-user communication capabilities. In response to risks and negative experiences, parents guide, communicate, and set rules for their children's use of online games. During interviews, parents also stated that they blocked the option to play with strangers and prevented their children from using headsets that allow them to speak with others. 89 percent of parents reported that their strategies effectively protected their children while playing games online. However, parents also stated that they would like additional help. In particular, they liked the idea of children only being able to play with other children of a similar age and wanted there to be more ways to ensure that their children would not be able to communicate with strangers.



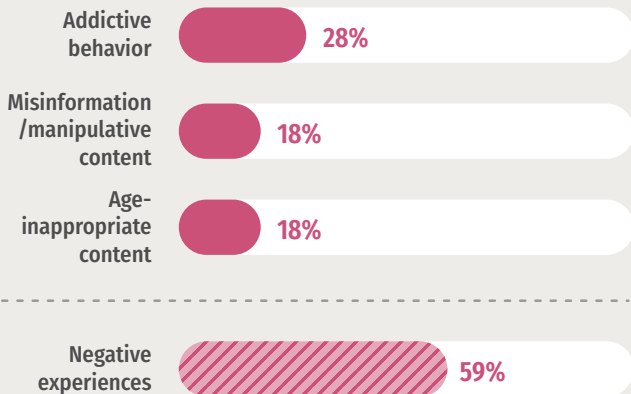
Figure 9. Protecting children using online games, parents' perspectives

ONLINE GAMES

Top positive experiences
(% of parents)



Top negative experiences
(% of parents)

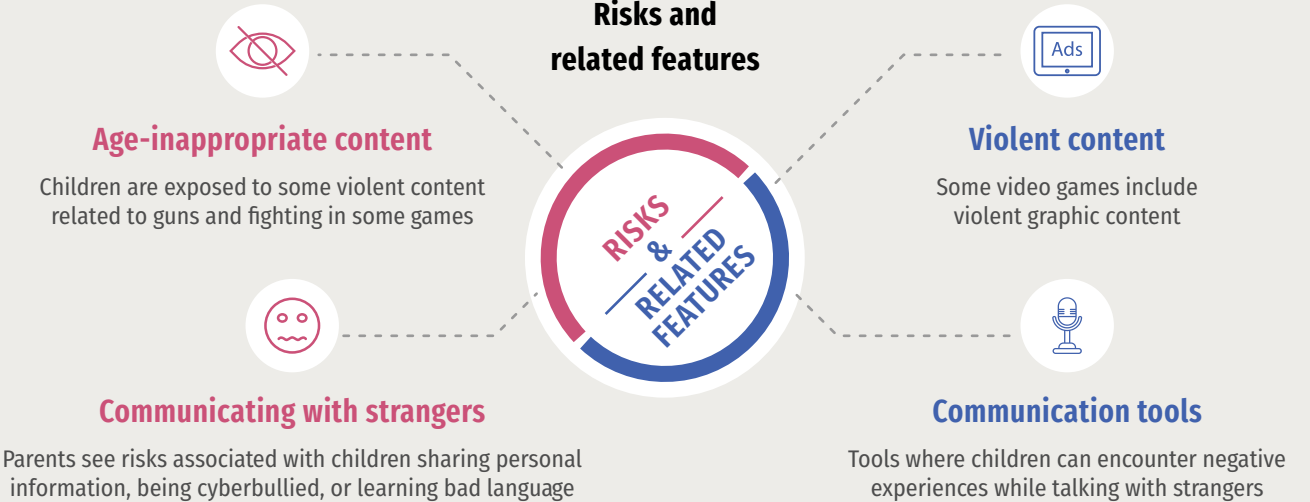


During the interviews, parents also reported negative experiences as a result of communicating with others.

“Some of the benefits are, one, he is entertaining himself, secondly he gains more knowledge because there are some words those people will use that he can apply to his own life too.”
Parent of a 10-year-old boy, Nigeria.

“It depends on the game, some games are like a communication channel. I think that’s the risk. (...) She may even give her WhatsApp number.”
– Parent of a 7-year-old girl, Brazil.

Risks and related features



Top parental strategies to protect their children online (% of parents)



43%

Guide or educate



40%

Speak about the experience



40%

Set rules for its use

In the interviews, parents shared additional strategies they used to protect their children when using online games.

“ I always warn my son to play with close friends and with cousins because they are a source of trust, so I do not worry about my son from any of these online services.”

– Parent of a 12-year-old boy, KSA.

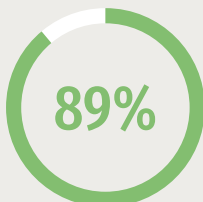
“ He takes time period and we allow him to play within that time period only.”

– Parent of a 12-year-old boy, India.

“ I tend to supervise the games more because I'm the one who manages the downloads on the iPad since the account is under my name.”

– Parent of a 8-year-old girl, U.S.

Parents reported their strategies were highly effective, but they stated they still need some help to protect their children when using online games.



of parents said their strategies were very effective or effective in protecting their children in online games

“ Some of the games need supervision, they should tell us about the games that harm their mentality, the games that are full of violence. They should notify us about that.”

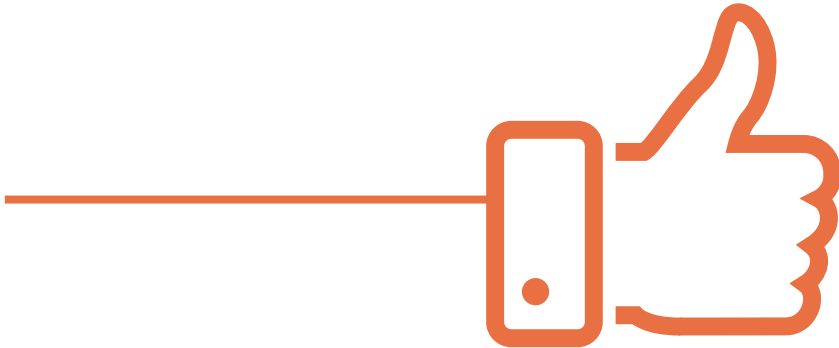
– Parent of a 16-year-old girl, KSA.

“ Authentication should be done like Aadhaar card or sharing such stuff then only giving permission to create the account, there should be stamp like if my child is playing game then it should be written aside that this person is authentic and he is safe to play.”

– Parent of a 12-year-old boy, India.

“ I think not having the age control is a contributing factor. I think the platforms should have this age control, I mean... There's always a way to cheat, but I believe it would make the online environment safer. Not only the expertise filters that the game has, but age filters, because there are kids, like my son, that are really good at the game, but I don't think they should be allowed to play with grown ups.”

– Parent of a 10-year-old boy, Brazil.



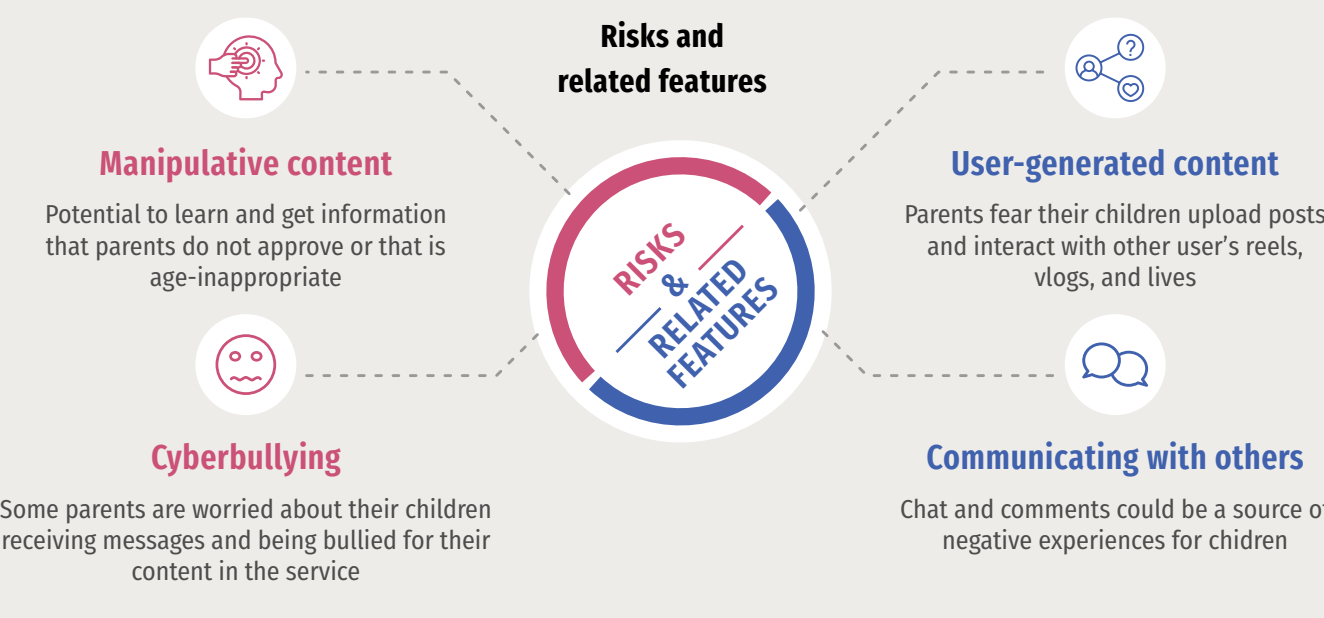
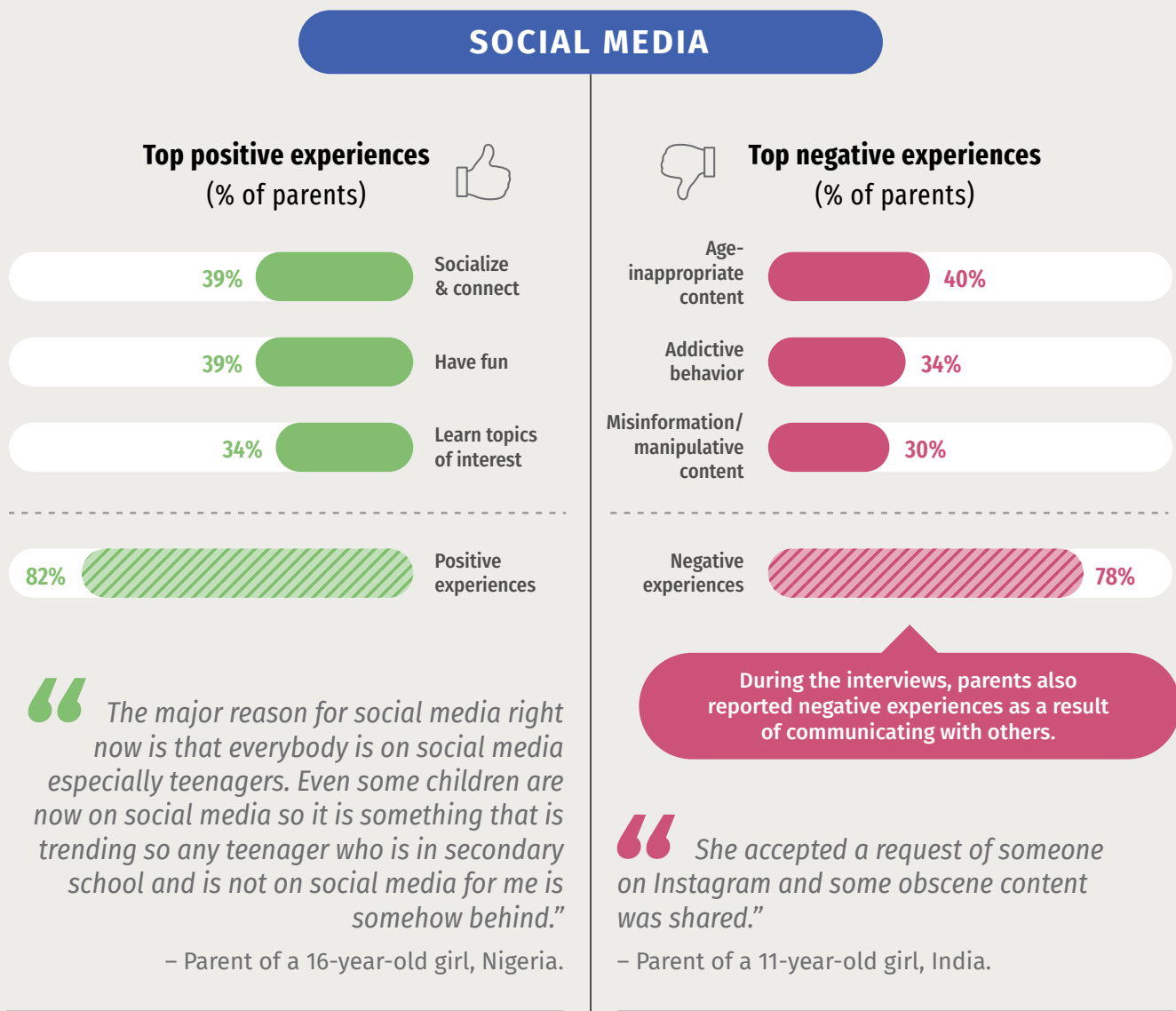
5.3 Social media

Social media allows children to connect with and view content and posts added by other users. These types of services often become a concern for parents with older children. Although younger children may occasionally use social media, most underage social media users are older than 10 years old. During interviews, parents expressed numerous concerns about social media including that their children experience cyberbullying, learn bad habits from social media influencers, and receive inappropriate requests to share private content. Among these concerns, only misinformation or manipulative content was an actual top negative experience for children on social media (30 percent). Cyberbullying and communicating with strangers were not common

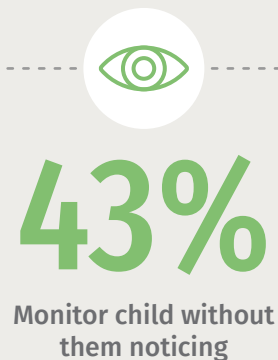
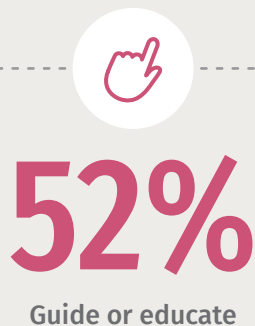
experiences for children on social media as only 1 in 5 had one of these experiences while using a social media service. Parents reported using strategies to monitor their children's social media usage more closely, such as linking their profiles to those of their children. Other parents reported constantly checking their children's posts and tags. 94 percent of parents reported that their strategies effectively protect their children on social media. Yet they also stated that they would like to have additional tools to monitor what their children view on social media.



Figure 10. Protecting children using social media, parents' perspectives



Top parental strategies to protect their children online (% of parents)



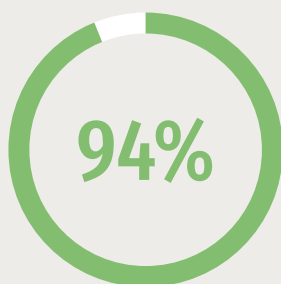
During the interviews, parents shared additional strategies they use to protect their children when using social media.

“ So that boy targeted 2-3 female students of the school and by making 2-3 fake accounts he started to trouble those girls, so we started to ignore initially and then we blocked that boy.”
– Parent of a 17-year-old girl, India.

“ I only check her posts and sometimes what her friends post and have her tagged on it.”
– Parent of a 16-year-old girl, Brazil.

“ We have each other’s accounts. So, I know what she is uploading. And I can open her phone at any time.”
– Parent of a 11-year-old girl, KSA.

Parents reported that their strategies were highly effective, but that they still need some help to protect their children when using social media.



of parents said their strategies were very effective or effective in protecting their children on social media

“ They should do something about their security. To protect her from bad friends.”
– Parent of a 17-year-old girl, Nigeria.

“ On Instagram and Facebook it should be there (parental controls) or there should be tools where you can check what children are watching, so the link should be there with the parents.”
– Parent of a 17-year-old girl, India.



5.4 Streaming Services

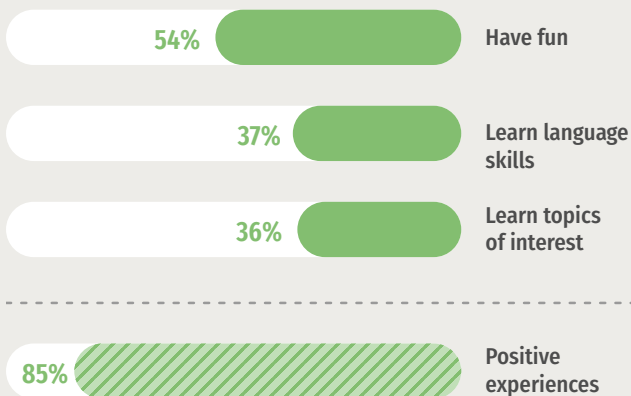
Parents often perceive streaming services as “safe spaces.” This may be due to the curated aspect of streaming content that are often paid services that lack user-generated and user-to-user communications features. Parents also often watch streaming content together with their children and use parental controls, making them feel more in control. However, in the interviews with parents, concerns were expressed about their children viewing age-inappropriate content. Inappropriate content for the age of the child was the top negative experience for children in streaming services, with 34 percent of parents reporting their children watched age-inappropriate content on the service. Although what parents consider to be age-inappropriate varies

by parent, in the case of streaming services, parents commonly defined age-inappropriate content as content that included violence, nudity, or that clashed with their cultural values. Besides watching the content together with the children, several parents also reported during the interviews that they set up a child’s profile on streaming services to make sure that their children were not viewing age-inappropriate programming. 94 percent of parents stated that their strategies to protect their children when using streaming services were very effective. Yet, parents also reported needing some help to ensure that children do not watch movies and shows not meant for their age.

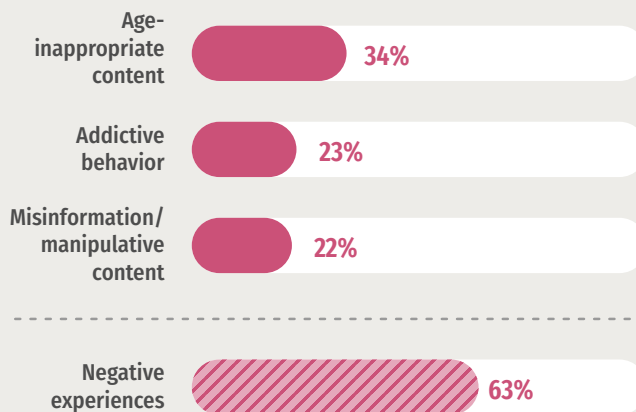
Figure 11. Protecting children using streaming services, parents' perspectives

STREAMING SERVICES

Top positive experiences (% of parents)



Top negative experiences (% of parents)

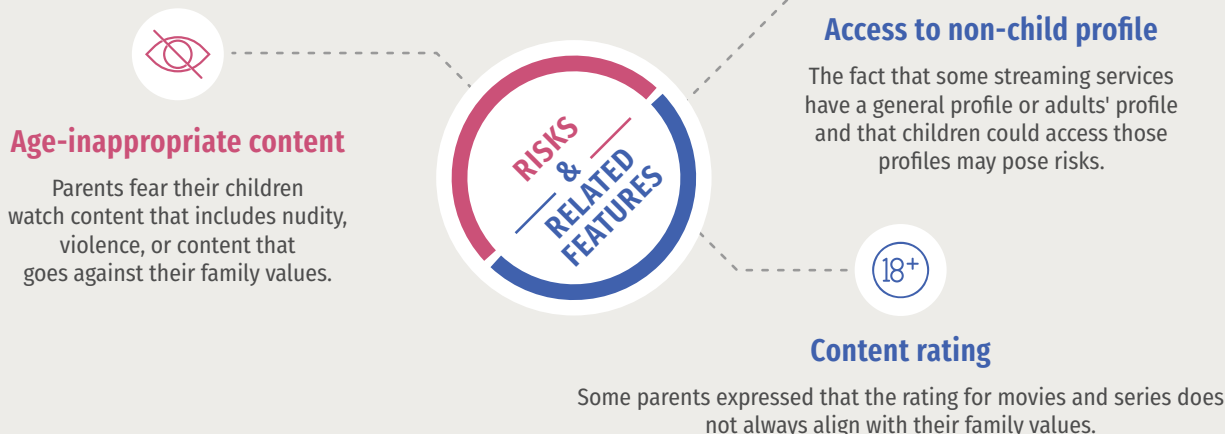


During the interviews, parents did not report children watch content in streaming services different than nudity or violence.

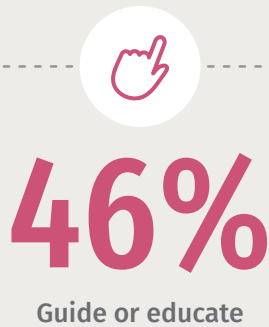
“Entertainment and educational also if used in the right manner because there are many adventure which we can see sitting at home and it helps to know the world outside.”
– Parent of a 17-year-old girl, India.

“To access videos or movies that are not for his age, like violent movies where there is killing, and not appropriate stuff for his age.”
– Parent of a 7-year-old boy, Brazil.

Risks and related features



Top parental strategies to protect their children online (% of parents)



In the interviews, parents shared additional strategies they use to protect their children when using streaming services.

“ Suppose my child watches anything from my account on Netflix then I get notified instantly so that I can take a step at the same moment.”

– Parent of a 17-year-old girl, India.

“ We’re used to discuss everything since he was young and we were watching movies and series together.”

– Parent of a 16-year-old boy, KSA.

“ I’d say mostly for any video streaming platform where he has his own profile set to a child. And he can only watch specific things right now, such as G-rated shows.”

– Parent of a 6-year-old boy, U.S.

Parents reported their strategies were highly effective, but they stated they still need some help to protect their children when using streaming services.

94%

of parents said their strategies were very effective or effective in protecting their children on streaming services

“ It’s only if she access the profile that is not the kids profile. She has access to the kids profile. If she accesses another profile, there will be other movie options, different segments from (the ones for) her age, you know? And I think that would be it. But if she accesses her profile, there’s no risk.”

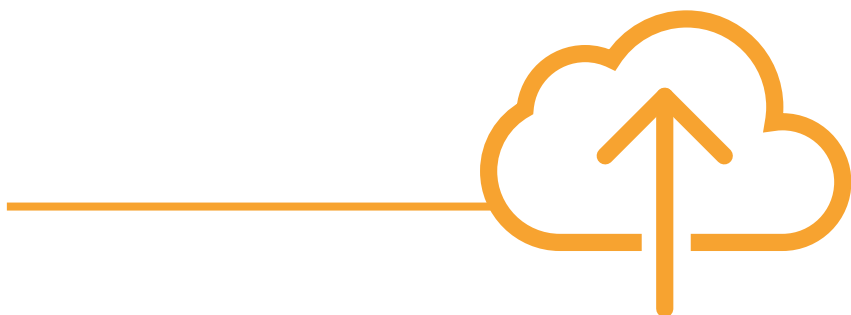
– Parent of a 6-year-old girl, Brazil.

“ Disneyland which has programs for kids to observe its content more. Although they already block some content, but still there available inappropriate content.”

– Parent of a 17-year-old boy, KSA.

“ It is the streaming online. As a Muslim, as I told you earlier we don’t want him to see something that is nakedness, first of all, pornography and any other thing that has to do with something that is very distant from our culture.”

– Parent of a 15-year-old boy, Nigeria.



5.5 User-generated content platforms

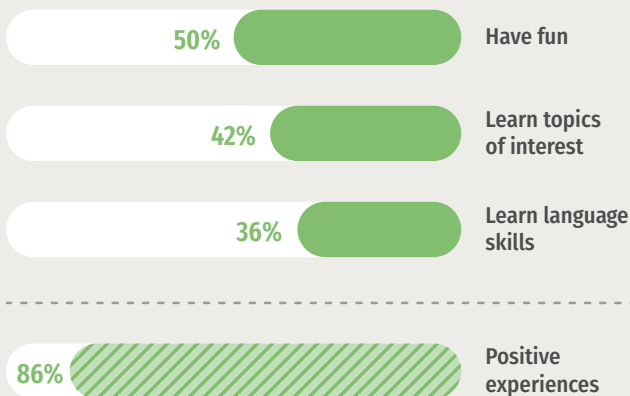
Parents identified services that offer user-generated content as providing some of the greatest benefits and potential risks. Parents recognized that their children had positive experiences learning from educational user-generated content, but they were also less comfortable with their children using user-generated content platforms as compared to all other online services. In interviews with parents, some reported that their children were exposed to content related to self-harm and extreme violence, including content on suicide and animal cruelty. Although this was a small minority of parents, it is

notable that similar situations were not identified for any of the other online services covered. To protect their children online, parents reported pre-approving the content that their children can watch and monitoring their children's use of user-generated content platforms without their children knowing. 91 percent of parents felt that their strategies are very effective in protecting their children on user-generated content platforms. Parents also stated that they would like additional help to protect their children from age-inappropriate content, such as passwords and age controls.

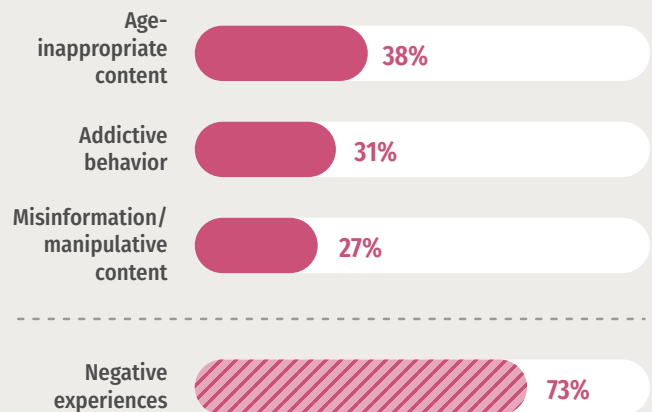
Figure 12. Protecting children using user-generated content platforms, parents' perspectives

USER-GENERATED CONTENT PLATFORMS

Top positive experiences (% of parents)



Top negative experiences (% of parents)



Age-inappropriate content in UGC is sometimes related to self-harm and extreme violence.

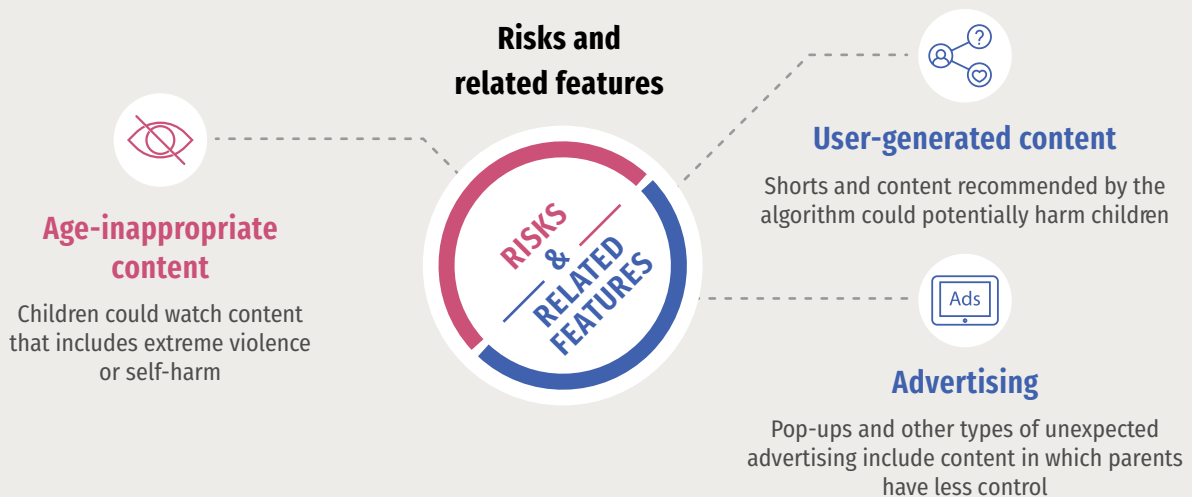
“There’s benefits, yeah. My child does know things that for his age makes him stand out in school. He likes to watch channels and contents that make him always into what’s happening. History content.”

– Parent of a 8-year-old boy, Brazil.

“My kids were really into watching Peppa Pig. Unfortunately, they came across a YouTube page that re-enacted the episodes but with vulgar language and violent themes, like talking about killing and other inappropriate content.”

– Parent of a 8-year-old boy, U.S.

Risks and related features



Top parental strategies to protect their children online (% of parents)



53%

Guide or educate



46%

Speak about the experience



41%

Monitor them without them noticing

In the interviews, parents shared additional strategies they used to protect their children when using user-generated content platforms.

“If you’re not keeping a close eye on your child, they could end up watching inappropriate content. It’s not just about age-appropriate videos; they can easily click on any video and view it. So, when it comes to YouTube, I tend to be more vigilant.”

– Parent of a 7-year-old boy, U.S.

“Whatever he watches is already seen by us, like I told you he follows ‘Saurabh Joshi’, so we beforehand watches his vlog, so the content is safe for him, and Sambhavna’s content also we watch with him.”

– Parent of a 12-year-old boy, India.

“I usually turn on my screen recorder when I let the younger two watch YouTube.”

– Parent of a 10-year-old boy, U.S.

Parents reported their strategies were highly effective, but they still need some help to protect their children when using user-generated content platforms.

91%

of parents said their strategies were very effective or effective in protecting their children on user-generated content platforms

“YouTube to erase inappropriate promoting ads and content.”

– Parent of a 16-year-old boy, KSA.

“I think, as I said, on YouTube, because it’s more open... Those open platforms that don’t have age ratings and that you can’t put a password on. I think they could put a password, like -- a platform that doesn’t have an age filter, you should be allowed to put a password on it, that would be cool.”

– Parent of a 7-year-old girl, Brazil.

“The one I think I need help on is on YouTube; on YouTube we have a lot of things there that will not benefit a child. So if they can restrict children from going through that YouTube of a thing, it will be better.”

– Parent of a 12-year-old girl, Nigeria.

6 Conclusion

Focusing across five different online services—messaging applications, online games, social media, streaming services, and user-generated content platforms—this report presents insights on parents' perceptions in terms of the benefits that these services provide, perceived risks for their children's online experiences, and the adaptive strategies that parents employ in response to those risks. Additional insights into children's perceptions complement the study. This approach aims to address specific types of online engagement and unique features of online services that are more likely to result in benefits, risks, harms, or solutions as compared to children's online screen time or internet usage more broadly.

6.1 Key points to keep children safe online

Building upon the ITU's Guidelines on Child Online Protection (COP), this report underscores the collective responsibility of parents, educators, industry, and policymakers in bolstering online child protection. It acknowledges the importance of involving parents, as well as children in the development and implementation of safeguarding strategies.

For parents, this report offers additional insights regarding key considerations for child online protection.

For educators, it provides insights into the perceptions and evaluations of families regarding children's online behaviors and highlights the need for additional support, which may be provided through the educational sector.

For industry, the report highlights areas to strengthen safety tools and factor in safety-by-design into overall experiences. **For policymakers**, the findings should be considered in discussions around new policy, legal, or regulatory frameworks. The research also has implications for educational awareness-raising programs and interventions to which different stakeholders can contribute.

Below are key points that parents, educators, industry, and governments should consider when endeavoring to keep children safe online.

6.2. An approach based on evidence, risk, and differentiation

Educators should raise awareness among children and parents about differentiated opportunities and online risks to educate children and families.

Industry should consider the implications of different levels of parental trust across services and how to address these in practical terms. With this in mind, policymakers too, should design legal, policy, or regulatory frameworks that adequately address opportunities, risks, and potential harms to minors online.

Parents play a crucial role in recognizing the specificities of each service and responding accordingly to the risks that each platform poses, and they should continue to adapt their strategies according to their children's unique needs. The research shows that parents often have differing attitudes and levels of concern for different services in the online ecosystem. This depends on a variety of factors, some of them personal while others are based on existing and identified harm typologies that the research highlights. It is also clear from the findings that parents and children seek different solutions based on the type of online service. While it is not possible for parents, educators, service providers, or policymakers to create a catch-all solution that completely prevents all harms, there are clear trends around the major concerns, risks, and harms that would be worth addressing through a risk-based, differentiated approach. This approach should be built on a child rights-based approach that considers the age and developmental maturity of children.

6.3 Empowering parents with tools and awareness

Tools, such as parental controls and ratings, can be great allies for parents when it comes to protecting their children and parents should be encouraged to actively implement and use such mechanisms. The report highlights areas in which to develop stronger tools to address gaps based on service and ensure age-appropriate experiences. Digital services providers should continue to strengthen educational offerings, making them as easy to use and accessible as possible.

Educators play an important role as part of a wider stakeholder approach, providing effective online safety education in schools and more informal educational settings. Ideally, educators would have the resources and capacity to integrate online safety into the general curriculum and address issues as they arise on a more ad hoc basis.

In addition, governments should ensure that age-appropriate digital literacy education is integrated into national educational curricula for all children. Government-led internet safety awareness campaigns for children, families, and educators are important to ensure outreach and strategy to ensure effective distribution. In addition, governments should ensure that parents are informed about the existence of universal and systematic child online protection mechanisms that they can turn to when seeking help to identify, respond to and report instances of online harm.

6.4 Collaboration

Protecting children online requires close coordination and collaboration between different stakeholders. A collective and holistic approach, where children, parents, educators, ICT industries and governments work hand in hand will create a safer and more educational online environment for younger generations.

The report points to parents playing a central role in safeguarding their children online and suggests that different stakeholders would benefit from more in-depth engagement with diverse sets of parents to inform their practice. Through NGOs, school networks, Safer Internet Centers and other networks, parents could be brought into industry working groups more broadly.

Policy makers also play an essential role in assessing how the various systems interact and in identifying the areas where cross-sectoral cooperation is needed. They can actively seek to collaborate with parents, educators, children, industry, and other national and multilateral institutions to support actions and awareness campaigns to ensure children are safe online.

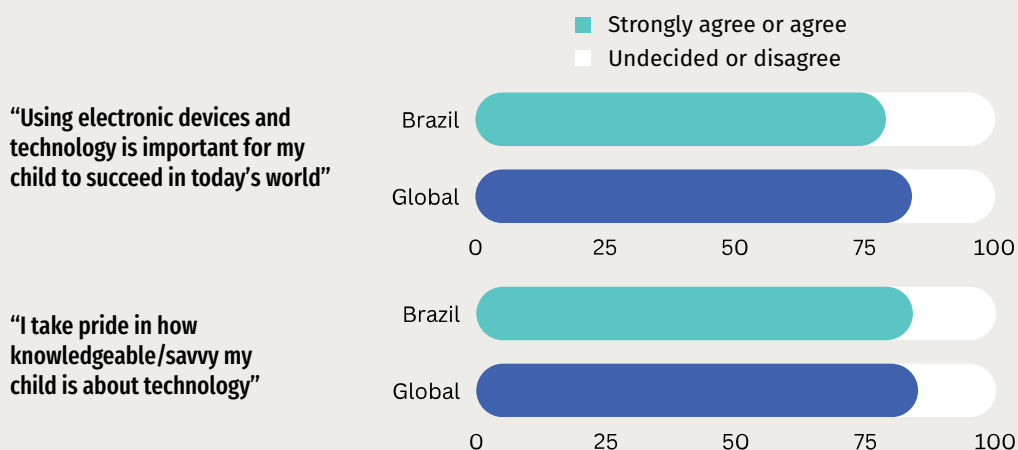
7 Annex A: Country briefs





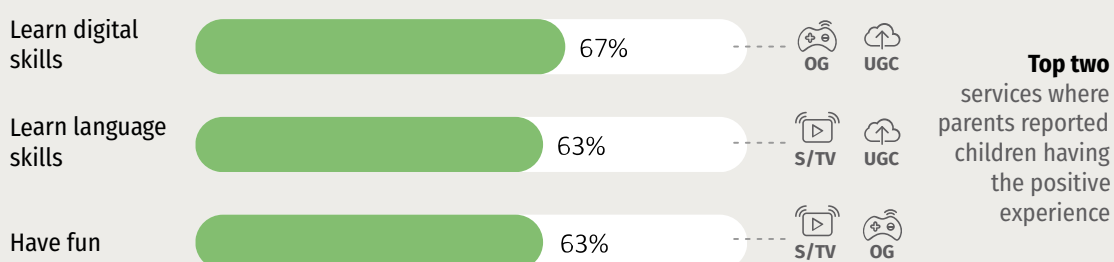
BRAZIL

Figure A.1. Parents' general perception about their children's use of technology (% of parents)



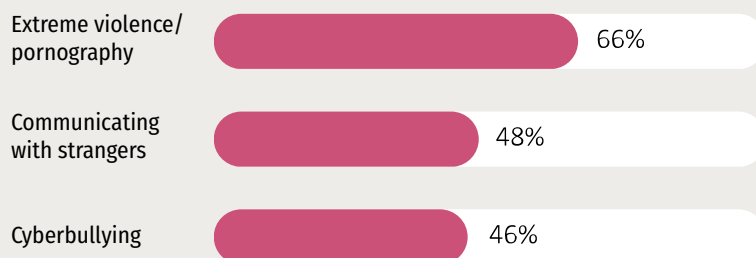
In Brazil, a smaller share of parents (79 percent) reported that the use of technology is important for their children's success, compared to the overall sample (84 percent). The percentage of parents that reported taking pride in their children being technologically savvy is in line with the average trend observed in the rest of the countries.

Figure A.2. Technology and its top benefits for children according to parents (% of parents)

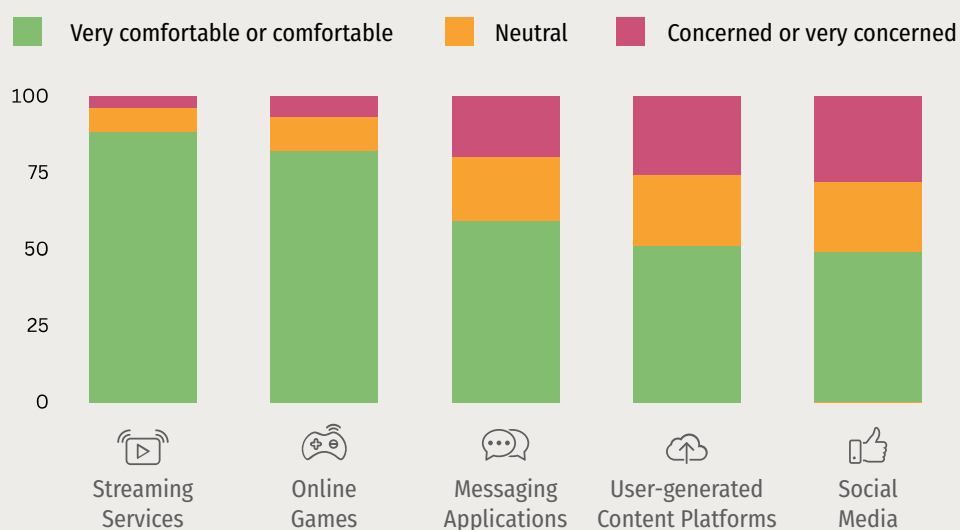


Learning a skill or a language are two out of the three top potential benefits parents are most excited about regarding their children's internet usage. This is in line with the sample average. However, in Brazil, more parents expressed excitement about their children using the internet to have fun than in the other sampled countries.

In Brazil, **parents reported their children more often having the top positive experiences with UGC, streaming services, and online games.** This is in line with the overall average in the rest of the countries.

Figure A.3. Parents' top three concerns about their children online activities (% of parents)

Compared to the sample average, **parents in Brazil worried more about their children communicating with strangers and experiencing cyberbullying.** Misinformation, bad influence, and age-inappropriate content—all top concerns in the sample average—were not among the Brazilian parents' top concerns. But, as in the other countries sampled, **exposure to extreme violence or pornography remains the top concern for parents.**

Figure A.4. Parents' comfort levels by online service (% of parents)

Compared to the sample average, parents in Brazil are **less comfortable with messaging applications, social media, and UGC.** Parents in Brazil are also **more comfortable with online games and streaming services than the sample average.**

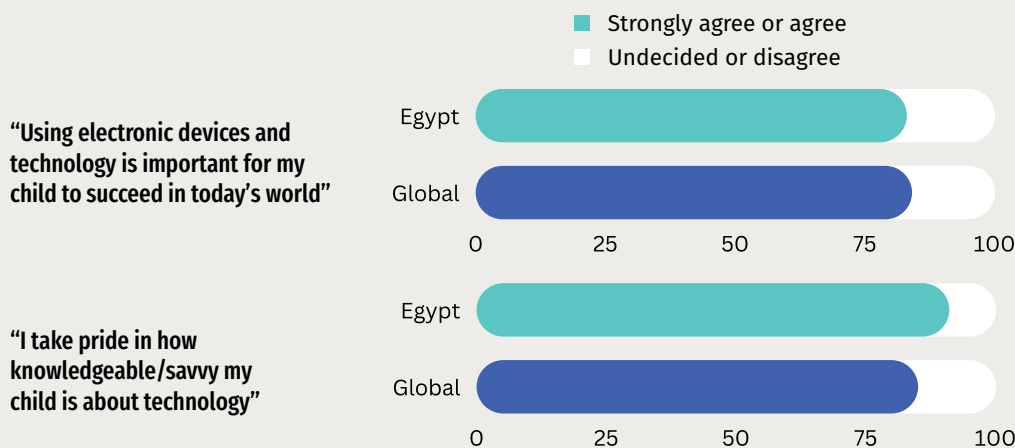
Figure A.5. Top parental strategies to protect children per online service (% of parents)

SERVICES	TOP STRATEGIES		
 Messaging Applications	Guide (59%)	Communicate (48%)	Set rules (40%)
 Online Games	Guide (52%)	Set rules (49%)	Communicate (40%)
 Social Media	Guide (69%)	Communicate (60%)	Set rules (50%)
 Streaming Services	Guide (54%)	Ratings & advice (50%)	Set rules (42%)
 User-generated Content Platform	Guide (64%)	Set rules (52%)	Communicate (49%)

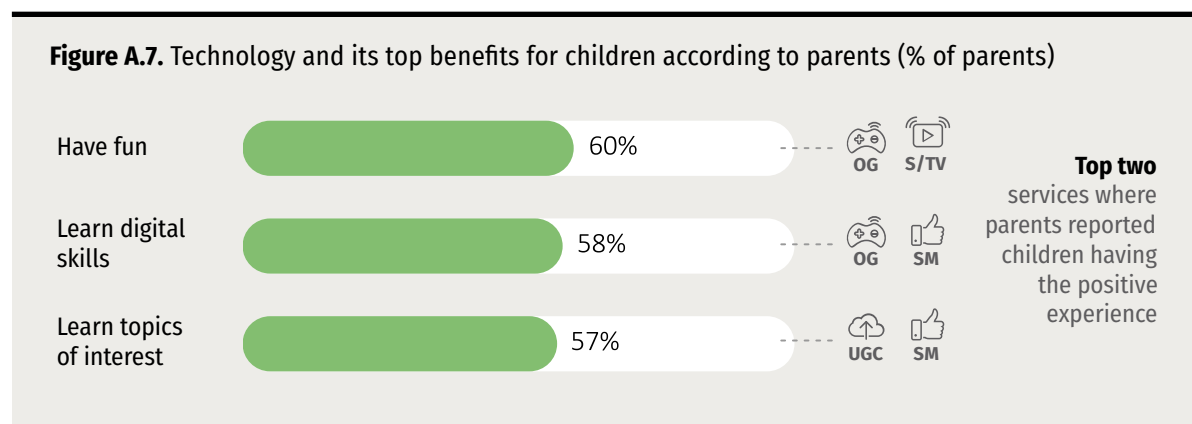
Although the strategies by service do not vary significantly according to the quantitative data, evidence from the qualitative data indicates that parents’ strategies for child online protection vary by service. During the interviews, it was evident that the approach of guiding or setting rules varies when parents were asked what actions they take to protect their children based on each of the online services. In contrast with the overall average, parents in Brazil do not include monitoring without their children noticing as a strategy that they implement with the different online services. But overall monitoring was a common strategy that Brazilian parents employed for messaging applications, social media, and UGC, similar to the averages in other countries.

 **EGYPT**

Figure A.6. Parents’ general perception about their children’s use of technology (% of parents)

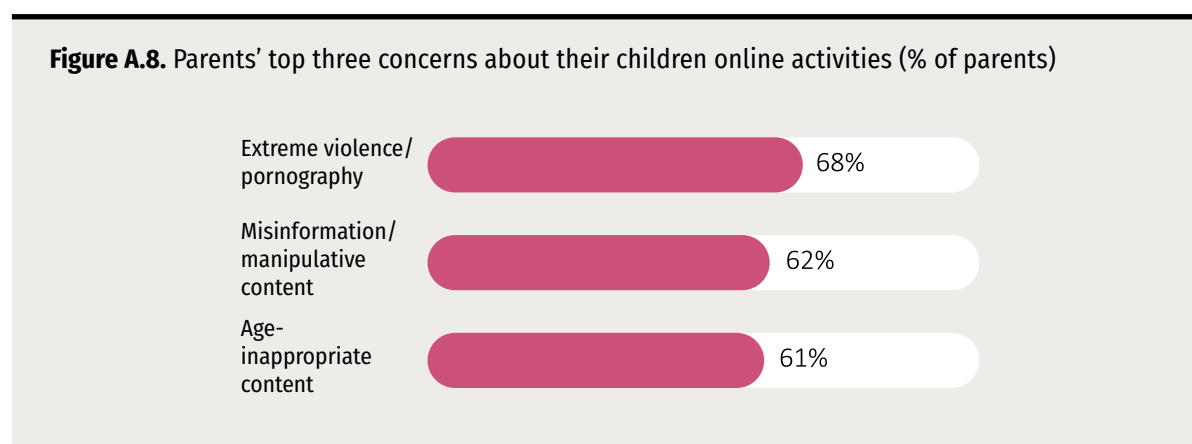


In Egypt, parents reported viewing technology as a means for success, which is in line with parents in the other sampled countries. Yet, the number of parents that reported being proud of their children's technological savviness was higher in Egypt than in other countries.



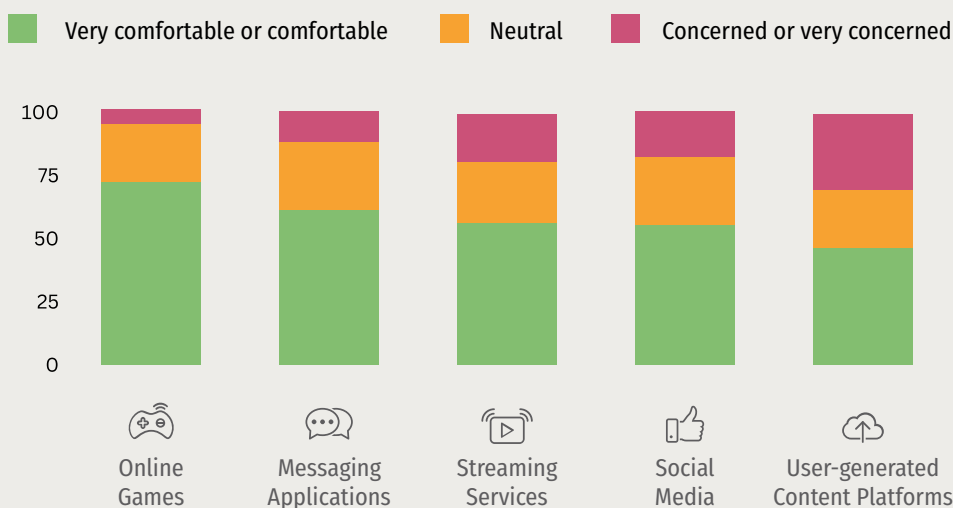
Parents in Egypt were most excited about their children having fun online, although this was closely followed by learning digital skills, the top benefit reported by parents in the overall sample.

Interestingly, and in contrast with the results from the other analyzed countries, **parents in Egypt were more likely to state that their children could use social media to improve their digital skills and learn about topics of interest.** In the other sample countries, parents were more likely to associate UGC and streaming with those experiences.



Egyptian parents' concerns were in line with other sampled countries, although they felt more strongly about these issues than other parents. **Their top concern—expressed by an even larger share of parents than in the other sampled countries—was exposure to extreme violence, misinformation and manipulative content, and exposure to age-inappropriate content.** For example, whereas 55 percent of parents in the sample overall expressed concern for extreme violence and pornography, in Egypt this percentage reached 68 percent. For misinformation, this percentage jumped from 43 percent in other countries to 62 percent in Egypt. For age-inappropriate content, it rose from 37 percent in other countries to 61 percent in Egypt.

Figure A.9. Parents’ comfort levels by online service (% of parents)

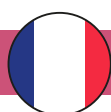


Parents in Egypt were most comfortable with online games and messaging applications. Notably, a large difference was observed in parents’ comfort levels with streaming services. On average among all the analyzed countries, 78 percent of parents reported feeling very comfortable or comfortable with streaming services whereas in Egypt only 56 percent reported feeling that way. However, they were least comfortable with social media and UGC. In general, parents in Egypt were less comfortable with all online services than the global average.

Figure A.10. Top parental strategies to protect children per online service (% of parents)

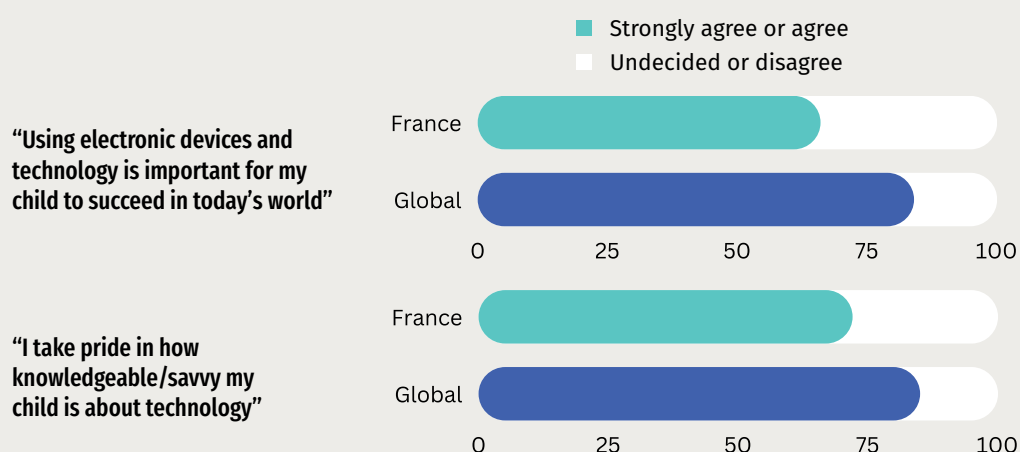
SERVICES	TOP STRATEGIES
Messaging Applications	Guide (49%) Communicate (43%) Parental controls (36%)
Online Games	Guide (46%) Communicate (42%) Set rules (35%)
Social Media	Guide (55%) Communicate (53%) Use service together (37%)
Streaming Services	Guide (51%) Communicate (45%) Use service together (44%)
User-generated Content Platform	Guide (56%) Communicate (51%) Parental controls (36%)

Although the strategies by service do not vary significantly according to the quantitative data, evidence from the qualitative data indicates that parents' child online protection strategies vary per service. During the interviews, it was evident that the approach of guiding or setting rules varies when parents were asked what actions they take to protect their children with each of the online services. Similar to other countries, parents in Egypt reported using guidance and communication with their children about the different online services as strategies to protect them. But in contrast to the general trend, **parents in Egypt reported that a strategy used for streaming and social media was to use the service together with their children.** This was not a strategy that was commonly brought up in discussions with parents in the other countries sampled.



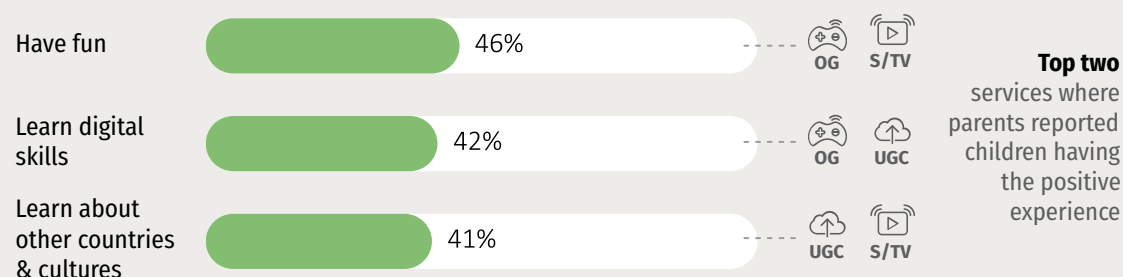
FRANCE

Figure A.11. Parents' general perception about their children's use of technology (% of parents)



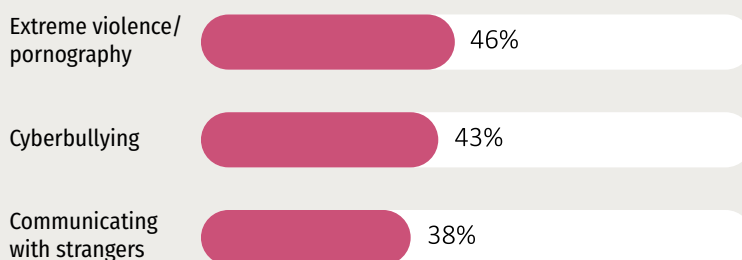
Parents in France were less likely to express excitement about the benefits technology could offer their children as compared to other surveyed countries. A lower percentage of parents in France reported that using electronic devices and technology is important for their children's success than in the other countries sampled. Similarly, the percentage of parents in France that reported they felt proud of how savvy their children are about technology was lower than in the other countries.

Figure A.12. Technology and its top benefits for children according to parents (% of parents)



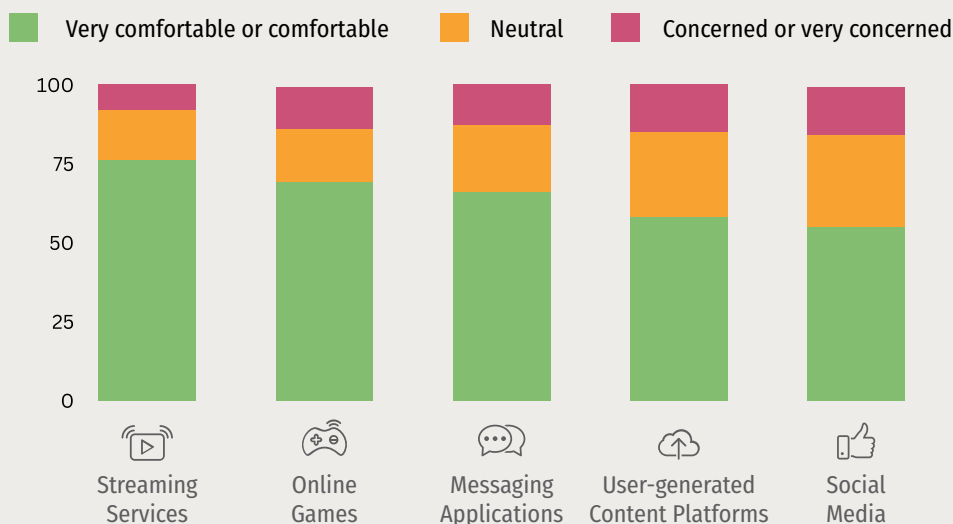
Like in Egypt, **having fun (46 percent)** was the main benefit that excites parents about their children going online, followed by **learning digital skills (42 percent), and learning about other cultures and countries (41 percent)**. In comparison to the general trend, parents in France did not report learning, improving a language, or learning about topics of interest among the top aspects that excited them about their children’s online activities. Similar to the general trend, **parents in France perceived UGC and streaming as services where their children can often learn. Online games were viewed as a service that offers both fun and digital skills training.**

Figure A.13. Parents’ top three concerns about their children online activities (% of parents)








Exposure to extreme violence or pornography remained the top concern for parents in France, in line with the general trend. In contrast with the general trend, cyberbullying and communicating with strangers were among the top concerns for parents in France, although 43 percent of parents or less reported being concerned about either of these two items.

Figure A.14. Parents’ comfort levels by online service (% of parents)



Parents in France are generally most comfortable with streaming, followed by online games and messaging applications, while they are least comfortable with social media and UGC. Comfort levels with the different services in France follow a similar trend to the average of all the other analyzed countries, although parents in France reported being slightly less comfortable than average with online games and social media.

Figure A.15. Top parental strategies to protect children per online service (% of parents)

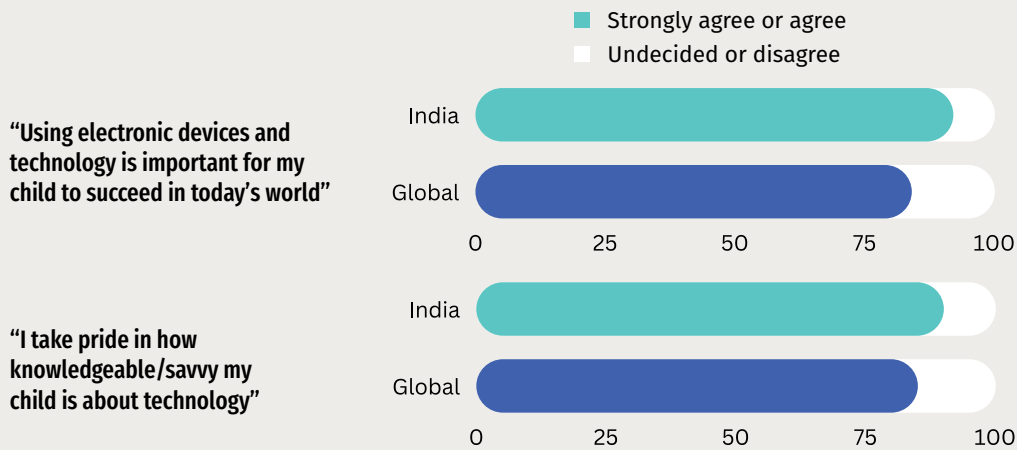
SERVICES	TOP STRATEGIES
 Messaging Applications	Guide (36%) Set rules (34%) Communicate (33%)
 Online Games	Set rules (40%) Communicate (28%) Guide (27%)
 Social Media	Communicate (42%) Set rules (35%) Guide (31%)
 Streaming Services	Set rules (39%) Parental controls (34%) Guide (32%)
 User-generated Content Platform	Guide (41%) Set rules (40%) Communicate (38%)

While the strategies by service do not vary significantly according to the quantitative data, evidence from the qualitative data indicates that the child online protection strategies of parents in France vary per service. During the interviews, it was evident that the approach of guiding or setting rules varies when parents were asked what actions they take to protect their children with each of the online services. In contrast to the general trend, parents in France reported that their top strategy to protect their children when using online games and streaming was to set rules for the use of these services. In the overall sample, guiding was the top strategy among parents for both online services.



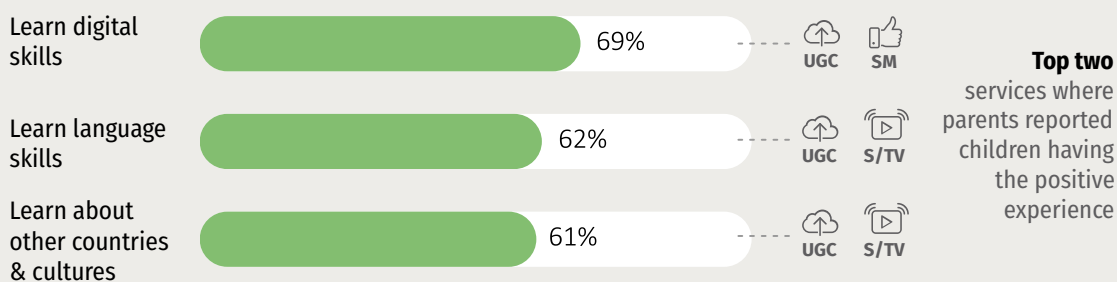
INDIA

Figure A.16. Parents’ general perception about their children’s use of technology (% of parents)

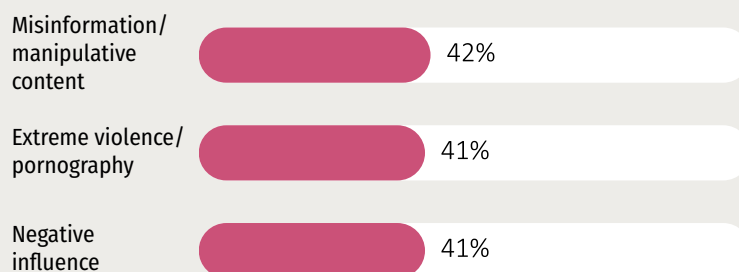


Parents in India seemed more excited about their children’s use of technology than in the other analyzed countries. A larger percentage of parents reported that using devices and technology is important for their children to succeed in today’s world and a larger percentage reported feeling proud about their children’s knowledge about technology.

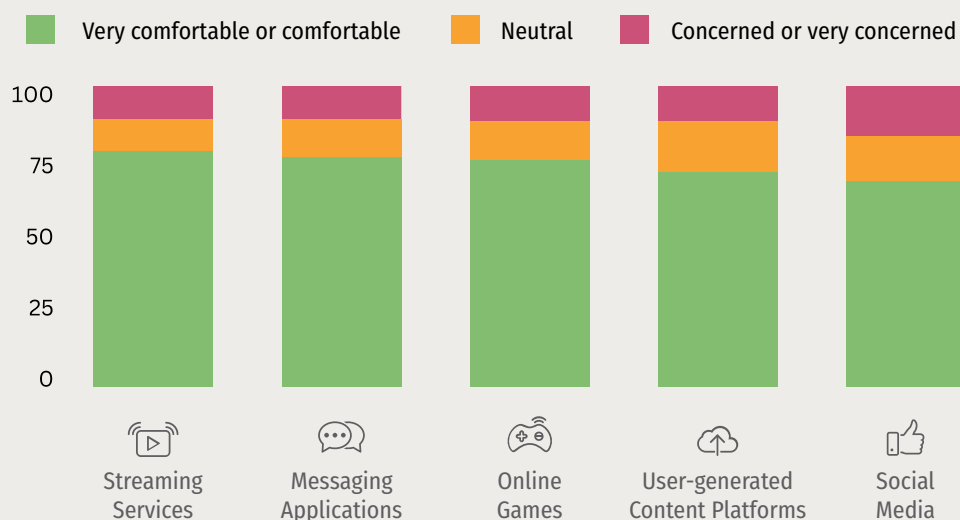
Figure A.17. Technology and its top benefits for children according to parents (% of parents)



The benefits that parents in India recognized about their children going online reflected the general trend. Overall, parents in India were excited about the educational aspect of technology. In contrast to the general trend, in which user-generated content platforms and online games were the most common services where children learn digital skills, **social media was perceived by parents in India as the second most common service where children learn digital skills.**

Figure A.18. Parents' top three concerns about their children online activities (% of parents)

The top concerns of parents in India were also in line with the rest of the sample average. **Parents' most common concerns in India were misinformation and manipulative content, closely followed by exposure to extreme violence and negative influence.**

Figure A.19. Parents' comfort levels by online service (% of parents)

Parents' positive view of technology in India was higher than the sample average. In line with this, parents' comfort levels in India with the different online services were higher than, or very similar to, the general trend. **Parents in India were most comfortable with streaming services, online games, and messaging applications. Notably, parents in India reported feeling more comfortable with social media and UGC than in other sampled countries.**

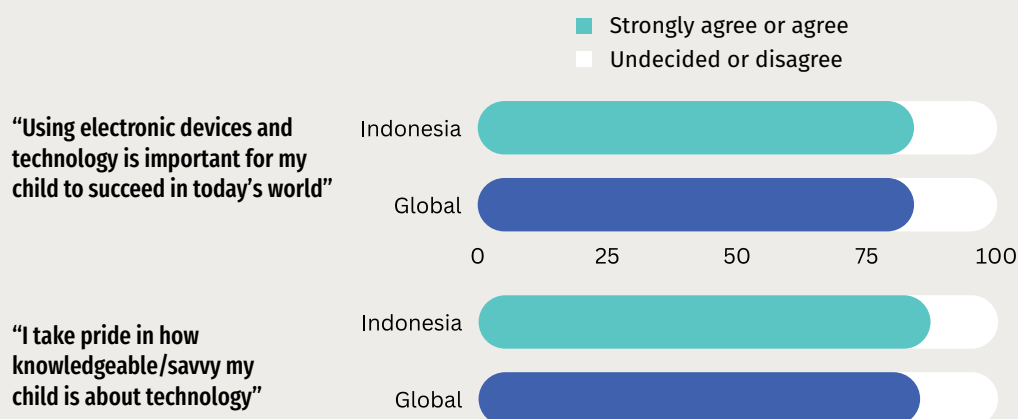
Figure A.20. Top parental strategies to protect children per online service (% of parents)

SERVICES	TOP STRATEGIES			
 Messaging Applications	Guide (47%)	Communicate (47%)	Monitor (46%)	
 Online Games	Guide (45%)	Communicate (44%)	Ratings & advice (42%)	
 Social Media	Communicate (55%)	Guide (50%)	Monitor (47%)	
 Streaming Services	Ratings & advice (48%)	Communicate (48%)	Use service together (45%)	
 User-generated Content Platform	Guide (58%)	Parental controls (46%)	Communicate (46%)	

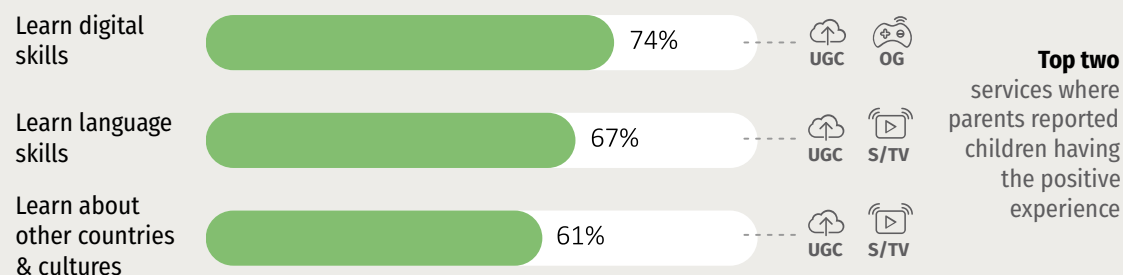
Although the strategies by service do not vary significantly according to the quantitative data, evidence from the qualitative data indicates that parents' child online protection strategies vary per service. During the interviews, it was evident that the approach of guiding or setting rules varies when parents were asked what actions they take to protect their children with each of the online services. When it comes to parents' strategies to protect their children online, in contrast with the general trend, parents in India reported using rating and advice among their top strategies to protect their children with online games and streaming.



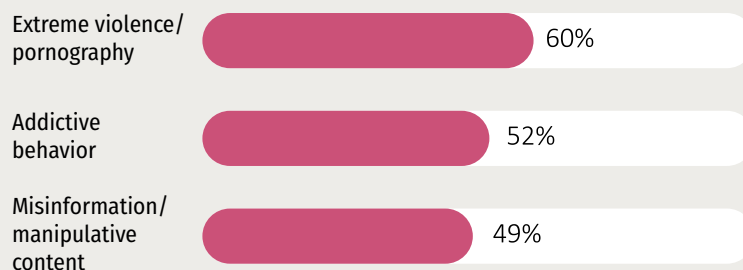
INDONESIA

Figure A.21. Parents' general perception about their children's use of technology (% of parents)

The levels of importance parents place on technology for their children's success as well as the level of pride they take in their children's technological proficiency is high in Indonesia and comparable to the rest of the sample.

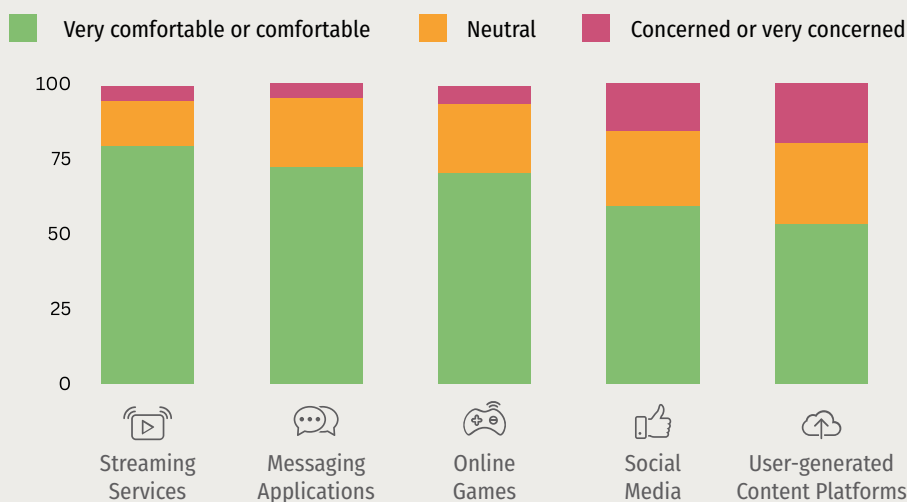
Figure A.22. Technology and its top benefits for children according to parents (% of parents)

Parents in Indonesia also have similar views regarding the benefits of their children's usage of online services more broadly. For example, **parents in this country considered UGC and streaming to provide the top benefits for their children**, in line with the other countries in the sample.

Figure A.23. Parents' top three concerns about their children online activities (% of parents)

One notable distinction was that parents in Indonesia were more concerned about their children developing addictive behaviors with online services than in other countries. This concern was not among the top three general concerns reported in the quantitative survey.

Figure A.24. Parents’ comfort levels by online service (% of parents)

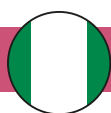


The **comfort levels of parents in Indonesia were similar to the general trend (higher comfort for streaming, online games, and messaging)** with small variation for messaging applications, with which parents feel more comfortable in Indonesia than the average. Regarding online games, social media, and UGC, parents in Indonesia are slightly less comfortable than the average.

Figure A.25. Top parental strategies to protect children per online service (% of parents)

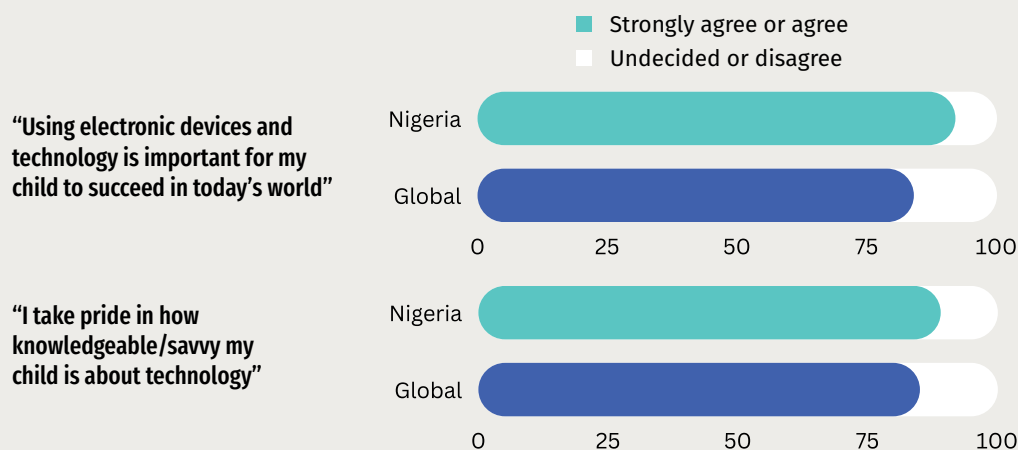
SERVICES	TOP STRATEGIES
Messaging Applications	Guide (52%) Communicate (46%) Set rules (38%)
Online Games	Guide (47%) Set rules (46%) Communicate (43%)
Social Media	Guide (63%) Communicate (61%) Monitor (48%)
Streaming Services	Guide (52%) Use service together (42%) Set rules (41%)
User-generated Content Platform	Guide (62%) Communicate (46%) Parental controls (45%)

While the strategies by service do not vary significantly according to the quantitative data, evidence from the qualitative data indicates that parents’ specific strategies to protect their children online do vary per service. During the interviews, it was evident that the approach of guiding or setting rules varies when parents were asked what actions they take to protect their children with each of the online services. More than any other strategy, parents in Indonesia relied on providing guidance to their children as a means of protecting them online. This was in line with the other sampled countries. Yet unlike other countries, Indonesian parents’ strategies, such as using the service together with the child and using parental controls, are among their top strategies for streaming and UGC, respectively.



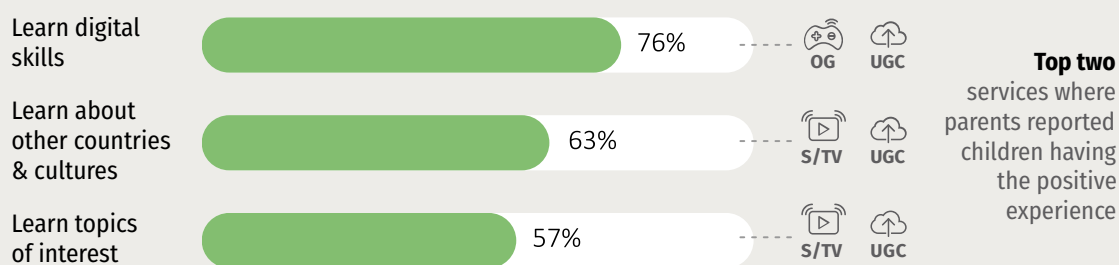
NIGERIA

Figure A.26. Parents' general perception about their children's use of technology (% of parents)

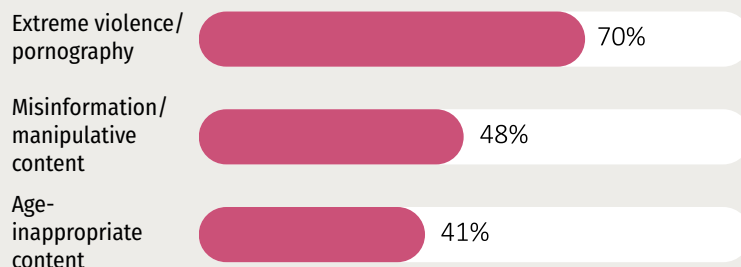


A larger percentage of parents in Nigeria than in the other analyzed countries **agreed that using devices and technology is important for their children's success in today's world and are proud of their children's savviness with technology.**

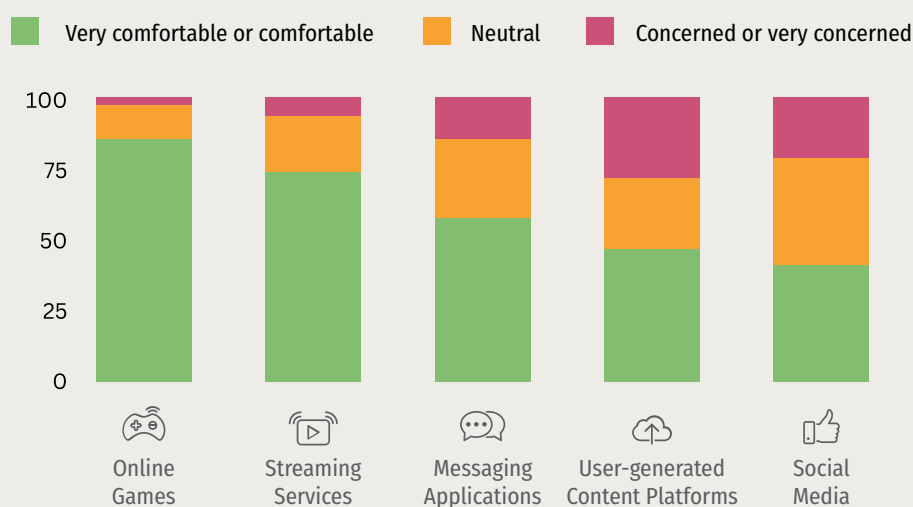
Figure A.27. Technology and its top benefits for children according to parents (% of parents)



As in the general trend, learning digital skills is the top benefit parents perceived about their children going online. Learning a different language was not reported to be as important for parents in Nigeria. They consider learning about other countries, cultures, and topics of interest to be more important. **UGC and streaming are among the top services where parents reported their children getting educational benefits. Online games were perceived as a service where children learn digital skills, besides having fun,** consistent with the trend found in the other countries.






Figure A.28. Parents' top three concerns about their children online activities (% of parents)

The top concerns for parents in Nigeria aligned with the general trend. **But the top concern, exposure to extreme violence or pornography, was higher in Nigeria than in the other countries.** 70 percent of parents in Nigeria reported being concerned about exposure to extreme violence and pornography, whereas the average for the rest of the sample was only 55 percent.

Figure A.29. Parents' comfort levels by online service (% of parents)

Parents in Nigeria generally had high comfort levels with online games and streaming services compared to other types of services. With the exception of online games, Nigerian parents' comfort levels with the different services were lower for almost all the online services in comparison to the average. Notably, the comfort level with social media in Nigeria is significantly lower than the average. **Less than half the parents (41 percent) reported feeling comfortable or very comfortable with social media,** whereas on average 60 percent of the parents sampled in other countries reported feeling this way about social media services.

Figure A.30. Top parental strategies to protect children per online service (% of parents)

SERVICES	TOP STRATEGIES		
 Messaging Applications	Guide (58%)	Communicate (47%)	Parental controls (41%)
 Online Games	Guide (50%)	Parental controls (46%)	Ratings & advice (41%)
 Social Media	Guide (55%)	Parental controls (54%)	Monitor (52%)
 Streaming Services	Parental controls (61%)	Guide (56%)	Ratings & advice (51%)
 User-generated Content Platform	Parental controls (62%)	Guide (50%)	Monitor (49%)

Although the strategies by service do not vary significantly according to the quantitative data, evidence from the qualitative data indicates that parents' child online protection strategies vary per service. During the interviews, it was evident that the approach of guiding or setting rules varies when parents were asked what actions they take to protect their children with each of the online services.

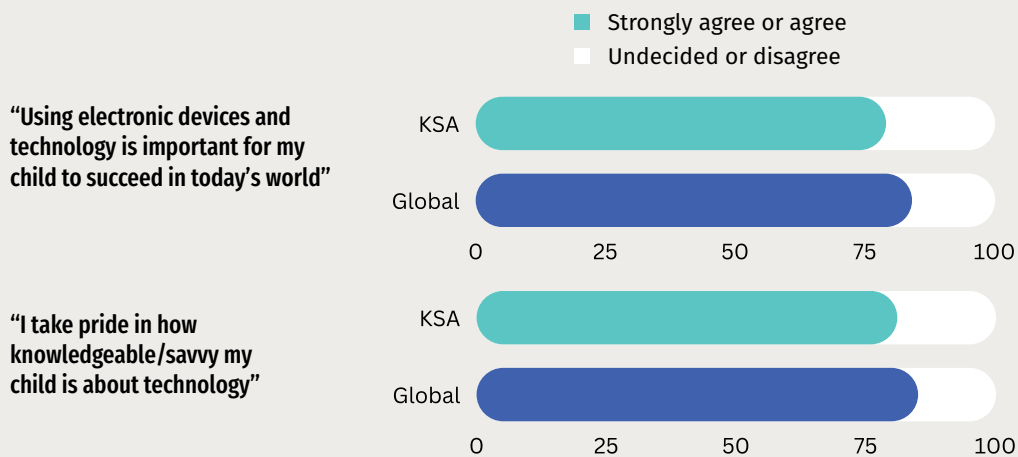
Parents in Nigeria commonly reported using parental controls with several of the services. Nevertheless, during the interviews in Nigeria, parents expressed limited knowledge about parental controls and when asked about these tools they often associated them with offline monitoring strategies. This indicates that knowledge of these tools is not widespread among parents.

In contrast to the global average, parents in Nigeria did not report using communication as one of their top three strategies to protect their children for the different online services.



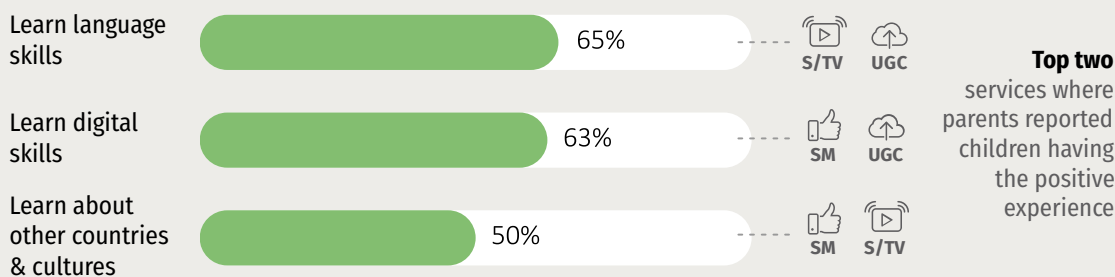
SAUDI ARABIA (KSA)

Figure A.31. Parents' general perception about their children's use of technology (% of parents)

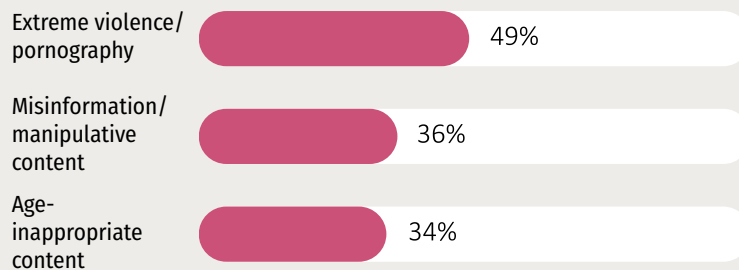


Parents in KSA were generally excited about the importance of their children using devices and technology to succeed in today's world and proud of how savvy their children are about technology, although this was slightly lower than the average among surveyed countries.

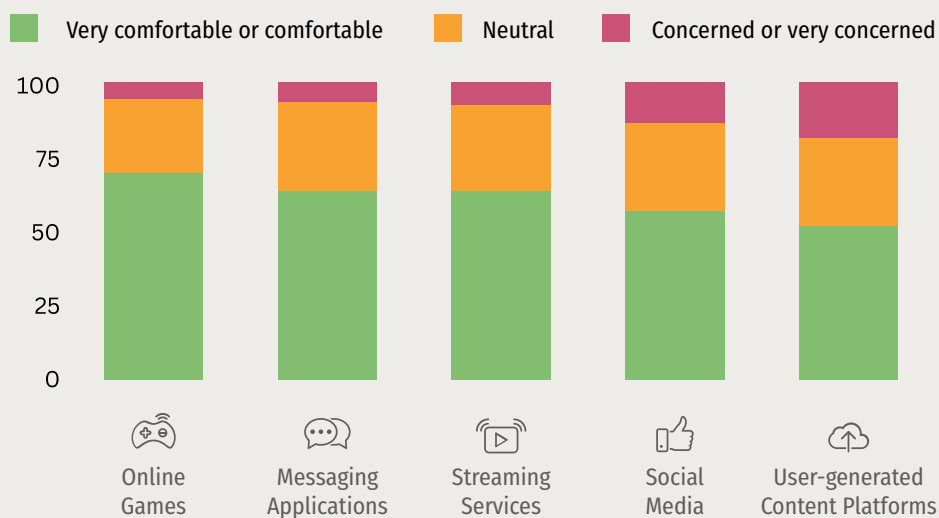
Figure A.32. Technology and its top benefits for children according to parents (% of parents)



The three top benefits KSA parents reported about their children going online were the same as in the sample overall. As for the services associated with each benefit, **parents in the KSA reported social media as a top service where their children experienced benefits related to learning digital skills and about other countries and cultures.** This is similar to the results in Egypt where parents reported that social media is among the top two services where children in that country learn digital skills and about topics of interest. In all the other countries the top online services associated with these positive experiences were UGC and streaming services.

Figure A.33. Parents' top three concerns about their children online activities (% of parents)

Parents in KSA have the same concerns as parents in the other sampled countries.

Figure A.34. Parents' comfort levels by online service (% of parents)

Parents in KSA are generally less comfortable than parents in the other sampled countries with online services. Notably, parents in KSA reported being significantly less comfortable with streaming services (64 percent) than parents in the general trend (78 percent). Parents were least comfortable with social media and UGC services.

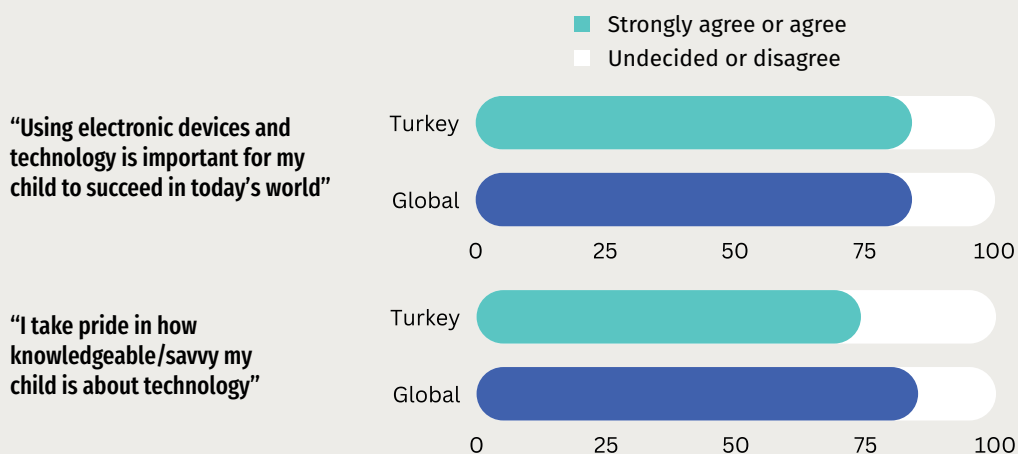
Figure A.35. Top parental strategies to protect children per online service (% of parents)

SERVICES	TOP STRATEGIES
 Messaging Applications	Guide (50%) Communicate (44%) Monitor (43%)
 Online Games	Communicate (43%) Monitor (40%) Older child helps (38%)
 Social Media	Guide (51%) Communicate (49%) Set rules (47%)
 Streaming Services	Guide (49%) Communicate (48%) Parental controls (43%)
 User-generated Content Platform	Communicate (51%) Guide (47%) Monitor (45%)

Although the strategies by service do not vary significantly according to the quantitative data, evidence from the qualitative data indicates that parents’ child online protection strategies vary per service. During the interviews, it was evident that the approach of guiding or setting rules varies when parents were asked what actions they take to protect their children with each of the online services. Parents in KSA followed similar strategies to protect their children as the overall sample average, but reported implementing some variations regarding online games and streaming. They incorporate their older children to assist with their younger children when using the service and using parental controls, respectively.

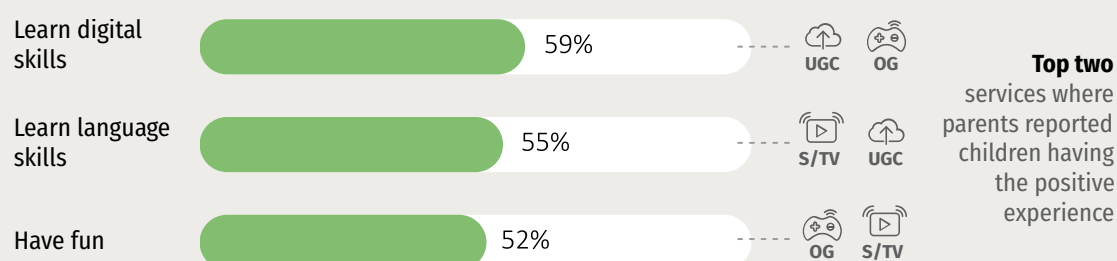
 **TURKEY**

Figure A.36. Parents’ general perception about their children’s use of technology (% of parents)



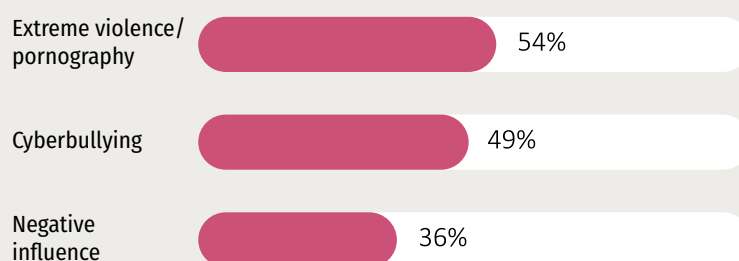
Turkish parents have a similar perspective to the overall average regarding the importance of using devices and technology for their children's success, but they felt less proud than parents in the general trend regarding how knowledgeable their children are about technology.

Figure A.37. Technology and its top benefits for children according to parents (% of parents)



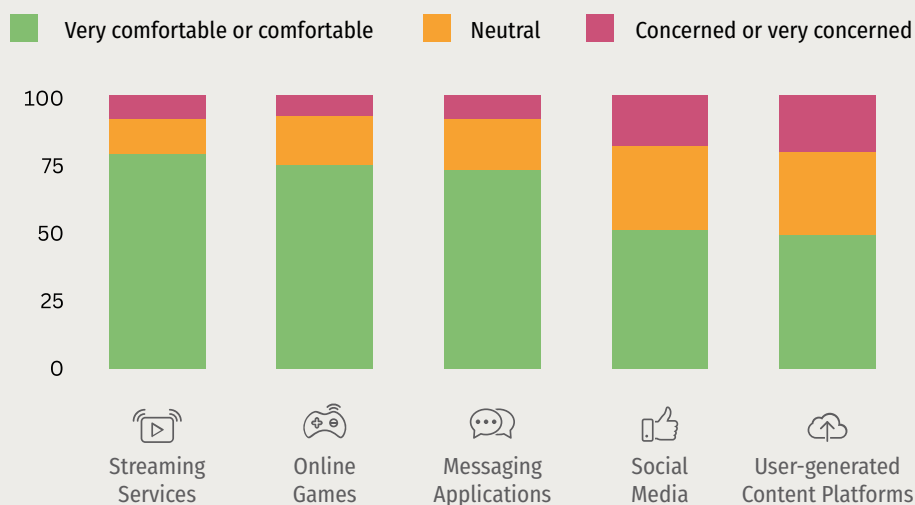
Having fun is among the top three benefits parents reported regarding their children's online usage, but learning digital skills and languages remained important benefits as well, in line with the general trend. The services parents associated with the different benefits are in line with the general trends.

Figure A.38. Parents' top three concerns about their children online activities (% of parents)



In contrast to the general trend, **cyberbullying is among the top three concerns for parents in Turkey.** Cyberbullying was also among the top three concerns for parents in Brazil and France.

Figure A.39. Parents’ comfort levels by online service (% of parents)



Parents in Turkey were most comfortable with streaming services, followed by online games and messaging applications. Parents in Turkey reported similar levels of comfort with the different online services to the general trend, except for levels of comfort for social media and UGC. In the case of these two online services, the comfort levels of parents in Turkey decreased in comparison to the general trend, from 60 percent to 51 percent and from 57 percent to 49 percent, respectively.

Figure A.40. Top parental strategies to protect children per online service (% of parents)

SERVICES	TOP STRATEGIES		
Messaging Applications	Guide (40%)	Monitor (34%)	Parental controls (30%)
Online Games	Guide (38%)	Set rules (33%)	Monitor (33%)
Social Media	Guide (48%)	Monitor (42%)	Communication (38%)
Streaming Services	Parental controls (40%)	Guide (39%)	Monitor (34%)
User-generated Content Platform	Guide (49%)	Monitor (45%)	Set rules (36%)

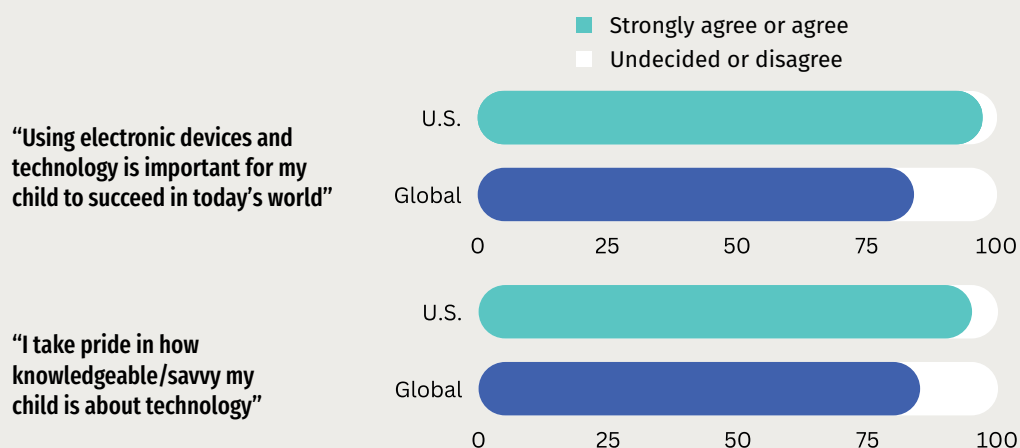
Although the strategies by service do not vary significantly according to the quantitative data, evidence from the qualitative data indicates that parents’ child online protection strategies vary per service. During the interviews, it was evident that the approach of guiding or setting rules varies when parents were asked what actions they take to protect their children with each of the online services.

Among the strategies parents use to protect their children, monitoring came up as a popular strategy across all online services in Turkey and, notably, communication was not among the top three parental strategies with any of the online services.



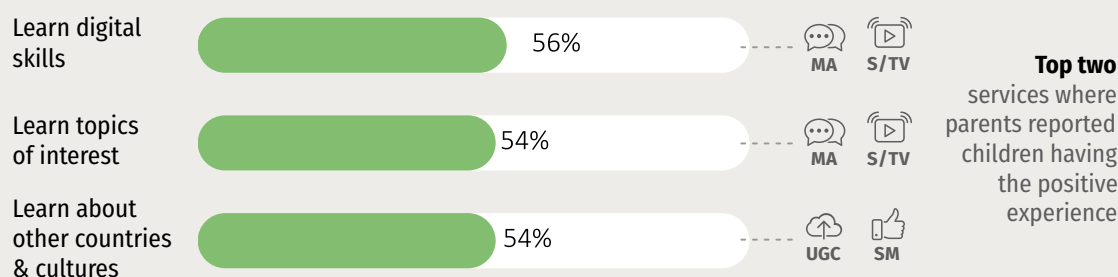
UNITED STATES

Figure A.41. Parents' general perception about their children's use of technology (% of parents)



A higher percentage of parents in the United States than in any other sampled country reported that the use of electronic devices and technology is important for their children to succeed in today's world and that they take pride in how knowledgeable their children are about technology.

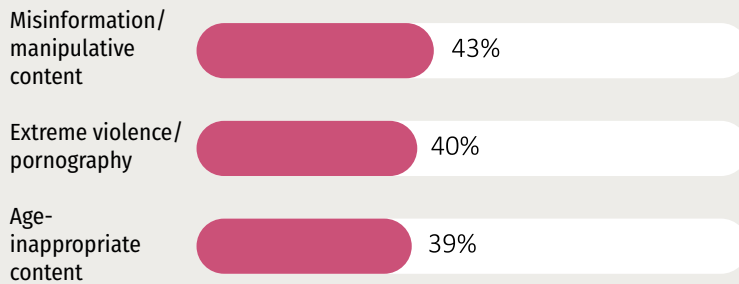
Figure A.42. Technology and its top benefits for children according to parents (% of parents)



The top three online benefits for children that U.S. parents identified all related to learning, and this was in line with the other countries surveyed. However, parents associated messaging applications as a top service where their children can learn digital skills and about topics of their interest. This is not in line with the general trend.¹⁴ In the general trend, parents identified user-generated platforms and streaming services as top services where their children can acquire these skills. Moreover, learning other languages was less important and learning about topics of interest was more important for parents in the United States than in the overall sample.

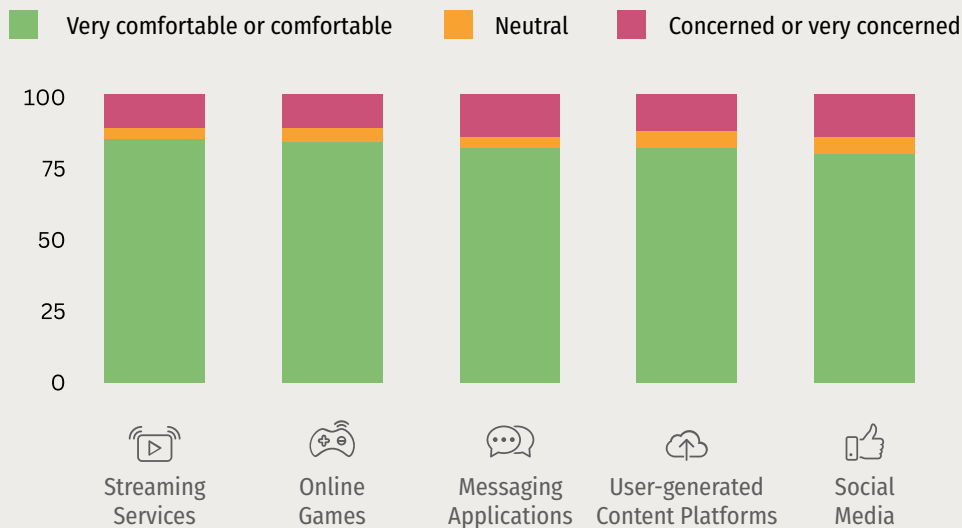
¹⁴ During the qualitative interviews, some parents reported Discord as a popular platform for children in the United States. Discord is a messaging application and social media platform that offers a variety of content. Its popularity among U.S. children could help explain this trend.

Figure A.43. Parents' top three concerns about their children online activities (% of parents)



Parents' top three concerns in the United States aligned with the general trend overall, but the order was different in the United States than in the other countries. In the U.S., **pornography and extreme violence is the second most common concern while it is the most common concern for parents in the overall sample**. Similarly, to France and India, the top concern reported by parents in the United States did not exceed 43 percent, indicating that there was no single concern that worried the majority of parents.

Figure A.44. Parents' comfort levels by online service (% of parents)



Parents in the United States reported feeling more comfortable with the online services than parents in the overall sample. The difference was particularly significant for social media and UGC. 60 percent of parents in the overall sample reported feeling comfortable or very comfortable with their children using social media, while this number increased to 80 percent in the United States. Similarly, with UGC, 57 percent of parents in the overall sample reported feeling comfortable or very comfortable with their children using UGC, while this number increased to 82 percent in the United States.

Figure A.45. Top parental strategies to protect children per online service (% of parents)

SERVICES	TOP STRATEGIES
 Messaging Applications	Communication (51%) Ratings & advice (51%) Use service together (46%)
 Online Games	Ratings & advice (49%) Communication (48%) Monitor (45%)
 Social Media	Communication (53%) Ratings & advice (50%) Monitor (48%)
 Streaming Services	Communication (50%) Ratings & advice (48%) Guide (46%)
 User-generated Content Platform	Communication (53%) Ratings & advice (48%) Monitor (46%)

Even if the strategies by service do not vary significantly according to the quantitative data, evidence from the qualitative data indicates that parents' specific strategies to protect their children online do vary per service. During the interviews, it was evident that the approach of guiding or setting rules varies when parents were asked what actions they take to protect their children with each of the online services. In contrast to the overall sample, parents in the U.S. did not report using guidance as one of their top strategies to protect children online.

8 Annex B: Methodology

TMG worked in partnership with Geopoll, an international survey deployment and data collection firm, to conduct an online survey in nine countries and in-depth online qualitative interviews in five countries.¹⁵

This work was carried out between April and July 2023. The survey resulted in a cross-sectional dataset used as part of the quantitative analysis that consisted of 16 multiple choice questions. The in-depth interviews with parents were used for the qualitative analysis. For this, a script was developed to guide the interviews, which consisted of 25 questions that parents and their children could answer freely and in their own words. These questions were not multiple choice, and the answers were not confined to a specified set of options. The interview script included 20 questions targeted at parents and five questions for children.

The target population for the survey and the interviews were people with at least one child aged 5 to 17 that used at least one online service.¹⁶ Participants were randomly selected. TMG and Geopoll surveyed approximately 5,000 individuals (approximately 500 people per country). The surveys were deployed across the nine countries via a mobile application. Geopoll conducted a total of 100 in-depth interviews with parents and children (20 in each country). All interviews were conducted online, and for ethical reasons, parents were present during the interviews with their children. Interviews were conducted in the local languages. A pilot was conducted to quality check the survey and interview script, as well as the translations, to ensure that the collected data would be valid and reliable.

Data analysis

During the quantitative analysis, the first step was to prepare the raw data for analysis. For this phase, TMG conducted a quality assurance process to ensure that the data complied with quality standards and the responses aligned with the survey logic. The quality assurance process included checking for missing data, removing outliers, and transforming variables to conduct the analysis. TMG created a set of new variables to draw possible correlations and trends in the data, including age groups (5-8, 9-12, and 13-17), a duration of screen time variable to assess the number of hours that parents allowed their children to use online services per week (1-7, 8-14, 15-21, 22-28, 29-35, and more than 35), and a variable to classify parents according to their parenting styles, including authoritarian, authoritative, permissive, and uninvolved. Other variables included the number of devices children used and the level of supervision for each type of device (dependent on if the child owned the device or if it was shared with their parents). During the second phase, TMG conducted statistical analyses of the data sets at a general level and per age, gender, and country. The analysis was conducted using RStudio.

For the qualitative analysis, TMG conducted a first read of the interviews to assess their general quality and consistency. Data processing was then conducted using thematic analysis. The mix-method approach in two phases utilized in the research allowed for the quantitative data to inform the qualitative search. Specific topics related to parenting styles, risk perceptions, comfort levels, and types of age-inappropriate content were included in the qualitative interviews and classified by themes during the analysis. Some of the themes during analysis included (1) differentiated parenting styles; (2) aspects that impact comfort levels; (3) online services risks and experiences differentiation; (4) levels of comfort per online service; and (5) features contributing to risks, among others.

¹⁵ The nine countries for the quantitative survey are Brazil, Egypt, France, India, Indonesia, Nigeria, Saudi Arabia, Turkey, and the United States and the five countries for the qualitative survey are Brazil, India, Nigeria, Saudi Arabia, and the United States.

¹⁶ The quantitative survey only covered five online services: messaging applications, online games (no distinction was made between single and multiplayer online games), streaming services, social media, and user-generated content platforms

Assumptions and limitations

Due to practical limitations, Geopoll only surveyed and interviewed parents with children that have access to the internet at home or on their mobile devices. Children that access the internet through other means, such as through their school or at a friend's home, were excluded. While this is a known limitation of the survey, its potential impact is limited in scope as most children connect to online services via their mobile phones or home devices.

The survey did not ask respondents to identify their socio-economic status, ethnicity, the language they spoke at home, or whether they reside in an urban or rural area, and only the in-depth interviews asked the parents about their level of education, although no disaggregation or analysis was conducted based on education levels. These factors influence the probability of someone using (or not using) the internet. However, the aim of this report is not to determine who uses the internet and why, but to learn more about the behavior of existing users. Future research on the topic could include disaggregation between parents in rural versus urban areas or based on educational levels, as these are variables that could affect parents' digital literacy levels and impact the approaches that parents take to protect their children online.¹⁷

The quantitative survey was directed at parents. The assumption was that parents are the most appropriate people to ask questions regarding their children's online safety and to learn what approaches they use to protect their children online. However, asking parents introduces the possibility that the data are affected by a social desirability bias, defined as a bias toward answering questions in ways that are likely to meet societal expectations rather than reflect actual practices. This would reduce the accuracy of the data collected. For example, this bias may motivate parents to answer questions in a way that gives the impression that they are more assertive when protecting their children than they really are. While little could be done to reduce this bias in the quantitative survey, the in-depth interviews offered the opportunity to gain a more granular understanding of what parents are doing to protect their children online and to probe parents' styles and strategies in greater depth. This helped reduce the potential for parents to misguide the interviewer. Future studies could utilize industry data to cross check and compare with data collected from parents to minimize social desirability bias.

During the qualitative interviews, caregivers were considered as individuals that (besides parents) could also be well suited to answer questions about the children's online safety. In an attempt to include caregivers in the qualitative interviews, the interviewer let parents know that if anyone else from the household who knew about the children's experience and wanted to participate in the interview could join, but no caregiver ended up participating in an interview.

Children safeguards

For the in-depth interviews, TMG and Geopoll were committed to ensuring the well-being and security of child participants. To this end, the interviewers were trained in and applied well-established best practices from the research community to protect children during the interview process.¹⁸

The respondents were given informed consent sheets and information about the interview prior to the interviews and during the recruitment process.¹⁹ Assurances were made regarding anonymity and confidentiality before the interviews and confirmed at the beginning of the interviews. Geopoll, the data collection partner, did not share personally identifiable information (PII) with TMG at any point. In accordance with applicable data privacy regulations, all data were stored on secure servers and with appropriate security controls for data processing. Below are the main aspects that TMG and Geopoll considered during the research process.

Consent

All families received the consent form and provided written consent before the interview. Advance, written parental consent was a prerequisite for parents and their children to participate in the interview process. Children also provided verbal agreement to participate in the interview.

¹⁷ Nikken and Jansz, 2014.

¹⁸ UNICEF, Global Kids Online, (2016)

¹⁹ Information shared with participants included name of the organization conducting the research, details of researchers to be contacted in case participants had questions, topic of the survey, length, and the need to have a parent present during the first part of the interview and child and parent present during the second part of the interview.

Ethical practices

The best interest of the child was at the center of the research process. Expert moderators were trained to handle individual situations and evaluate if the interview should continue or not in case ethical concerns arose. In deploying that judgment, the child's best interest was the number one priority. The moderators were instructed that the research must not harm the children at any point. The children were instructed that there are no right or wrong answers and that they could stop the interview at any time and skip any questions. Three main aspects related to children's safeguarding were shared with moderators during training:

- Children have the right to be heard, to freely express their views on all matters that affect them, and to exercise freedom of expression, thought, association, and access to information.
- All participation is voluntary and negotiable, and children have a right to withdraw at any point or refuse to engage in activities or respond to questions at any point.
- All staff should conduct themselves with honesty, integrity, and impartiality.

Additionally, TMG and Geopoll shared with moderators during their training ample information and recommendations related to parental coercion, power dynamics, distress, and gentle questioning styles for children.

9 Annex C: Sample details

Quantitative surveys

BRAZIL	No.	%	EGYPT	No.	%
Total and percentage over total sample	545	11%	Total and percentage over total sample	521	10%
Online services			Online services		
Messaging applications	346	63%	Messaging applications	241	46%
Online games	465	85%	Online games	390	75%
Social media	305	56%	Social media	300	58%
Streaming	477	88%	Streaming	195	37%
UGC	463	85%	UGC	381	73%
Children age			Children age		
Parents of children (ages 5-8)	211	39%	Parents of children (ages 5-8)	202	39%
Parents of children (ages 9-12)	151	28%	Parents of children (ages 9-12)	157	30%
Parents of children (ages 13-17)	183	34%	Parents of children (ages 13-17)	162	31%
Children gender			Children gender		
Boys	305	56%	Boys	309	59%
Girls	238	44%	Girls	212	41%
Other	2	0%	Other	0	0%

FRANCE	No.	%	INDIA	No.	%
Total and percentage over total sample	513	10%	Total and percentage over total sample	680	14%
Online services			Online services		
Messaging applications	195	38%	Messaging applications	390	57%
Online games	327	64%	Online games	548	81%
Social media	194	38%	Social media	416	61%
Streaming	386	75%	Streaming	462	68%
UGC	325	63%	UGC	483	71%
Children age			Children age		
Parents of children (ages 5-8)	211	41%	Parents of children (ages 5-8)	318	47%
Parents of children (ages 9-12)	134	26%	Parents of children (ages 9-12)	171	25%
Parents of children (ages 13-17)	168	33%	Parents of children (ages 13-17)	191	28%
Children gender			Children gender		
Boys	281.0	55%	Boys	392.0	58%
Girls	231.0	45%	Girls	288.0	42%
Other	1.0	0%	Other	0.0	0%

INDONESIA	No.	%	NIGERIA	No.	%
Total and percentage over total sample	527	11%	Total and percentage over total sample	536	11%
Online services			Online services		
Messaging applications	328	62%	Messaging applications	163	30%
Online games	366	69%	Online games	380	71%
Social media	288	55%	Social media	172	32%
Streaming	316	60%	Streaming	284	53%
UGC	455	86%	UGC	180	34%
Children age			Children age		
Parents of children (ages 5-8)	279	53%	Parents of children (ages 5-8)	312	58%
Parents of children (ages 9-12)	102	19%	Parents of children (ages 9-12)	120	22%
Parents of children (ages 13-17)	146	28%	Parents of children (ages 13-17)	104	19%
Children gender			Children gender		
Boys	286.0	54%	Boys	304.0	57%
Girls	241.0	46%	Girls	230.0	43%
Other	0.0	0%	Other	2.0	0%

SAUDI ARABIA	No.	%	TURKEY	No.	%
Total and percentage over total sample	555	11%	Total and percentage over total sample	579	12%
Online services			Online services		
Messaging applications	281	51%	Messaging applications	294	51%
Online games	377	68%	Online games	440	76%
Social media	277	50%	Social media	295	51%
Streaming	292	53%	Streaming	389	67%
UGC	403	73%	UGC	464	80%
Children age			Children age		
Parents of children (ages 5-8)	254	46%	Parents of children (ages 5-8)	315	54%
Parents of children (ages 9-12)	151	27%	Parents of children (ages 9-12)	125	22%
Parents of children (ages 13-17)	150	27%	Parents of children (ages 13-17)	139	24%
Children gender			Children gender		
Boys	319.0	57%	Boys	354.0	61%
Girls	235.0	42%	Girls	225.0	39%
Other	1.0	0%	Other	0.0	0%

Qualitative surveys

UNITED STATES	No.	%
Total and percentage over total sample	515	10%
Online services		
Messaging applications	360	70%
Online games	449	87%
Social media	417	81%
Streaming	431	84%
UGC	391	76%
Children age		
Parents of children (ages 5-8)	146	28%
Parents of children (ages 9-12)	108	21%
Parents of children (ages 13-17)	261	51%
Children gender		
Boys	292.0	57%
Girls	223.0	43%
Other	0.0	0%

BRAZIL	No.	%
Total and percentage over total sample	20	20%
Online services		
Messaging applications	17	85%
Online games single player	18	90%
Online games multiplayer	15	75%
Social media	9	45%
Streaming	20	100%
UGC	20	100%
Children age		
5-8	10	50%
9-12	5	25%
13-17	5	25%
Children gender		
Boys	10	50%
Girls	10	50%
Other	0	0%

INDIA	No.	%	NIGERIA	No.	%
Total and percentage over total sample	20	20%	Total and percentage over total sample	20	20%
Online services			Online services		
Messaging applications	10	50%	Messaging applications	15	75%
Online games single player	12	60%	Online games single player	11	55%
Online games multiplayer	5	25%	Online games multiplayer	5	25%
Social media	9	45%	Social media	7	35%
Streaming	15	75%	Streaming	19	95%
UGC	19	95%	UGC	16	80%
Children age			Children age		
5-8	10	50%	5-8	7	35%
9-12	6	30%	9-12	6	30%
13-17	4	20%	13-17	7	35%
Children gender			Children gender		
Boys	9	45%	Boys	10	50%
Girls	11	55%	Girls	10	50%
Other	0	0%	Other	0	0%

SAUDI ARABIA	No.	%	UNITED STATES	No.	%
Total and percentage over total sample	20	20%	Total and percentage over total sample	20	20%
Online services			Online services		
Messaging applications	14	70%	Messaging applications	11	55%
Online games single player	19	95%	Online games single player	17	85%
Online games multiplayer	18	90%	Online games multiplayer	15	75%
Social media	16	80%	Social media	7	35%
Streaming	18	90%	Streaming	20	100%
UGC	20	100%	UGC	20	100%
Children age			Children age		
5-8	5	25%	5-8	10	50%
9-12	6	30%	9-12	6	30%
13-17	9	45%	13-17	4	20%
Children gender			Children gender		
Boys	12	60%	Boys	10	50%
Girls	8	40%	Girls	10	50%
Other	0	0%	Other	0	0%



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