S. Hrg. 117-843

PROTECTING KIDS ONLINE: SNAPCHAT, TIKTOK, AND YOUTUBE

HEARING

BEFORE THE

SUBCOMMITTEE ON CONSUMER PROTECTION, PRODUCT SAFETY, AND DATA SECURITY OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED SEVENTEENTH CONGRESS FIRST SESSION

OCTOBER 26, 2021

Printed for the use of the Committee on Commerce, Science, and Transportation



Available online: http://www.govinfo.gov

U.S. GOVERNMENT PUBLISHING OFFICE ${\bf WASHINGTON} \ : 2024$

 $54\text{--}901~\mathrm{PDF}$

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED SEVENTEENTH CONGRESS

FIRST SESSION

MARIA CANTWELL, Washington, Chair

AMY KLOBUCHAR, Minnesota RICHARD BLUMENTHAL, Connecticut BRIAN SCHATZ, Hawaii EDWARD MARKEY, Massachusetts GARY PETERS, Michigan TAMMY BALDWIN, Wisconsin TAMMY BUCKWORTH, Illinois JON TESTER, Montana KYRSTEN SINEMA, Arizona JACKY ROSEN, Nevada BEN RAY LUJAN, New Mexico JOHN HICKENLOOPER, Colorado RAPHAEL WARNOCK, Georgia

, Washington, Creat
ROGER WICKER, Mississippi, Ranking
JOHN THUNE, South Dakota
ROY BLUNT, Missouri
TED CRUZ, Texas
DEB FISCHER, Nebraska
JERRY MORAN, Kansas
DAN SULLIVAN, Alaska
MARSHA BLACKBURN, Tennessee
TODD YOUNG, Indiana
MIKE LEE, Utah
RON JOHNSON, Wisconsin
SHELLEY MOORE CAPITO, West Virginia
RICK SCOTT, Florida
CYNTHIA LUMMIS, Wyoming

Melissa Porter, Deputy Staff Director
George Greenwell, Policy Coordinator and Security Manager
John Keast, Republican Staff Director
Crystal Tully, Republican Deputy Staff Director
Steven Wall, General Counsel

SUBCOMMITTEE ON CONSUMER PROTECTION, PRODUCT SAFETY, AND DATA SECURITY

RICHARD BLUMENTHAL, Connecticut, Chair

AMY KLOBUCHAR, Minnesota
BRIAN SCHATZ, Hawaii
EDWARD MARKEY, Massachusetts
TAMMY BALDWIN, Wisconsin
BEN RAY LUJÁN, New Mexico MARSHA BLACKBURN, Tennessee, Ranking JOHN THUNE, South Dakota ROY BLUNT, Missouri JERRY MORAN, Kansas MIKE LEE, Utah TODD YOUNG, Indiana

CONTENTS

Hearing held on October 26, 2021 Statement of Senator Blumenthal Statement of Senator Blackburn Statement of Senator Klobuchar Statement of Senator Markey Statement of Senator Thune Statement of Senator Baldwin Statement of Senator Cantwell Statement of Senator Lee Statement of Senator Luján Statement of Senator Cruz Statement of Senator Cruz Statement of Senator Senator Moran Statement of Senator Sullivan	Page 1 1 4 27 31 35 37 39 41 44 48 51
Statement of Senator Lummis	57
WITNESSES	
WIINESSES	
Jennifer Stout, Vice President of Global Public Policy, Snap Inc	5
Prepared statement	7
TikTok TikTok	10
Prepared statement	11
Leslie Miller, Vice President, Government Affairs and Public Policy, YouTube	17
Prepared statement	18
APPENDIX	
D	
Response to written questions submitted to Jennifer Stout by: Hon. Richard Blumenthal	75
Hon. Amy Klobuchar	77
Response to written questions submitted to Michael Beckerman by:	• • •
Hon. Richard Blumenthal	212
Hon. Amy Klobuchar	215
Hon. Marsha Blackburn	218
Hon. Rick Scott	219
Hon. Cynthia Lummis	220
Hon. John Thune Hon. Ted Cruz	$\frac{221}{221}$
Hon. Mike Lee	225
Response to written questions submitted to Leslie Miller by:	220
Hon. Richard Blumenthal	225
Hon. Amy Klobuchar	231
Hon. Marsha Blackburn	235
Hon. Rick Scott	235
Hon. Cynthia Lummis	
Hon. John Thune	237
Hon Mike Lee	239

PROTECTING KIDS ONLINE: SNAPCHAT, TIKTOK, AND YOUTUBE

TUESDAY, OCTOBER 26, 2021

U.S. SENATE,
SUBCOMMITTEE ON CONSUMER PROTECTION, PRODUCT
SAFETY, AND DATA SECURITY,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 10:01 a.m., in room SR-253, Russell Senate Office Building, Hon. Richard Blumenthal, Chairman of the Subommittee, presiding.

Present: Senators Blumenthal [presiding], Cantwell, Klobuchar, Markey, Baldwin, Luján, Blackburn, Thune, Moran, Lee, Cruz, Sullivan, and Lummis.

OPENING STATEMENT OF HON. RICHARD BLUMENTHAL, U.S. SENATOR FROM CONNECTICUT

Senator Blumenthal. Welcome to this hearing on protecting kids on social media. I want to thank the Ranking Member, Senator Blackburn, who has been a very, very close partner in this work, as well as Chairman Cantwell and Ranking Member Wicker for their support. We are joined by Senator Thune and Senator Amy Klobuchar and Senator Ed Markey. They have all been extraordinary leaders in this effort. And today, I should note, is the first time that TikTok and Snap have appeared before Congress. I appreciate you and YouTube for your testimony this morning. Means a lot.

Our hearing with the Facebook whistleblower, Frances Haugen, was a searing indictment, along with her documents of a powerful, gigantic corporation that puts profits ahead of people, especially our children. There has been a definite and deafening drumbeat of continuing disclosures about Facebook. They have deepened America's concerns and outrage and have led to increasing calls for accountability, and there will be accountability.

This time is different. Accountability to parents and the public, accountability to Congress, accountability to investors and shareholders, and accountability to the Securities and Exchange Commission and other Federal agencies, because there is ample credible evidence to start an investigation there. But today we are concerned about continuing to educate the American public and ourselves about how we can face this crisis. What we learned from Ms. Haugen's disclosures and reporting since then is absolutely repugnant and abhorrent about Instagram's algorithms creating a perfect storm, in the words of one of Facebook's own researchers.

As that person said, it exacerbates downward spirals, harmful to teens, it fuels hate and violence, it prioritizes profits over the people that it hurts. In effect, the algorithms push emotional and provocative content, toxic content that amplifies depression, anger, hate, anxiety because those emotions attract and hook kids and others to their platforms. In effect, the more content and more extreme versions of it are pushed to children who expressed an interest in online bullying, eating disorders, self-harm, even suicide. And that is why we now have a drumbeat of demands for accountability, along with the drumbeats of disclosure. But we are hearing the same stories and reports of the same harms about the tech platforms that are represented here today.

I have heard from countless parents and medical professionals in Connecticut and elsewhere around the country about the same phenomenon on Snapchat, YouTube, and TikTok. In effect, that business model is the same, more eyeballs means more dollars. Everything that you do is to add users, especially kids, and keep them on your apps for longer. I understand from your testimony that your defense is, we are not Facebook, we are different, and we are different from each other. Being different from Facebook is not a defense. That bar is in the gutter. It is not a defense to say that you are different. What we want is not a race to the bottom, but really a race to the top. So we will want to know from you what specific steps you are taking that protect children, even if it means foregoing profits. We are going to want to know what research you have done.

Similar to the studies and data that have been disclosed about Facebook. And we are going to want to know whether you will support real reforms, not just the tweaks and the minor changes that you suggested and recounted in your testimony. The picture that we have seen from an endless stream of videos that is automatically selected by sophisticated algorithms shows that you too drive and strive to find something that teens will like and then drive more of it to them.

If you learn that a teen feels insecure about his or her body, it is a recipe for disaster because you start out on dieting tips, but the algorithm will raise the temperature, it will flood that individual with more and more extreme messages, and after a while, all of the videos are about eating disorders. It is the same rabbit hole, driving kids down those rabbit holes created by algorithms that leads to dark places and encourages more destructive hate and violence.

We have done some listening. I heard from Nora in Westport, who allowed her 11-year-old daughter, Avery, on TikTok because she thought it was just girls dancing. Avery wanted to exercise more with the shutdown of school and sports so like most people she went online. Nora told me about the rabbit hole that TikTok and YouTube's algorithms pulled her daughter into. She began to see ever more extreme videos about weight loss. Avery started exercising compulsively and ate only one meal a day. Her body weight dropped dangerously low, and she was diagnosed with anorexia. Avery is now luckily in treatment, but the financial cost of care is an extreme burden, and her education has suffered. We heard from parents who had the same experience.

So we, not only listened, but we checked ourselves. On YouTube, my office created an account as a teenager. Like Avery, we watched a few videos about extreme dieting and eating disorders. They were easy to find. YouTube's recommendation algorithm began to promote extreme dieting and eating disorder videos each time we opened the app. These were often videos about teens starving themselves, as you can see from this poster. The red is eating disorder related content, the green is all the other videos. One is before and the other is after the algorithm kicked in. You can see the difference. We also received these recommendations each time we watched other videos. It is mostly eating disorder content. There was no way out of this rabbit hole.

Another parent in Connecticut wrote to me about how their son was fed a constant stream of videos on TikTok related to disordered eating and calorie counting after looking up athletic training. As scientific research has shown, eating disorders and body comparison also significantly affect young men on social media. Young men often feel compelled to bulk up to look a certain way. Again, I heard about this pressure all too often. We created an account on TikTok. Troublingly, it was easy searching TikTok, to go from men's fitness to steroid use. It took us only 1 minute, 1 minute to find TikTok accounts openly promoting and selling illegal

We all know the dangers of steroids, and they are illegal. All of this research and facts and disclosures send a message to America's parents, you cannot trust big tech with your kids. Parents of America cannot trust these apps with their children. And big tech cannot say to parents, you must be the gatekeepers, you must be the social media copilots, you must be the app police because parents should not have to bear that burden alone. We need stronger rules to protect children online, real transparency, real accountability. I want a market where the competition is to protect children, not to exploit them, not a race to the bottom, but a competition for the top.

We have said that this moment is for big tech, a big tobacco moment. And I think there is a lot of truth to that contention because it is a moment of reckoning. The fact is that like big tobacco, big tech has lured teens despite knowing its products can be harmful. It has sought to associate itself with celebrities, fashion, and beauty, everything that appeals to a young audience. And like big tobacco, Facebook hid from parents and the public the substantial evidence that Instagram could have a negative effect on teen health. But the products are different. Big tech is not irredeemably bad like big tobacco. Big tobacco and the tobacco products, when used by the customer as the way the manufacturer intended, actually kill the customer.

As Ms. Haugen said, our goal is not to burn Facebook to the ground. It is to bring out the best to improve it, to impose accountability. As she said, "we can have social media we enjoy that connects us without tearing apart our democracy, putting our children in danger, and sowing ethnic violence around the world. We can do better." And I agree. Thank you, and we will turn now to the Rank-

ing Member.

STATEMENT OF HON. MARSHA BLACKBURN U.S. SENATOR FROM TENNESSEE

Senator BLACKBURN. Thank you, Mr. Chairman. And thank you to our witnesses for being here today. We do appreciate this. And Mr. Chairman, I thank your staff for the good work that they have done working to facilitate these hearings on holding big tech accountable. We appreciate that. And today's conversation is some-

thing that is much needed, and it is long overdue.

For too long, we have allowed platforms to promote and glorify dangerous content for its kid and teen users. In the weeks leading up to this hearing, I have heard from parents, from teachers, from mental health professionals who are all wondering the same thing, how long are we going to let this continue? And what will it take for platforms to finally crack down on the viral challenges, the illicit drugs, the eating disorder content, and the child sexual abuse material? We find this on your platforms, and teachers and parents and mental health physicians cannot figure out why you allow this to happen.

It seems like every day that I hear stories about kids and teens who are suffering after interacting with TikTok, YouTube, and Snapchat. Kids as young as nine have died doing viral challenges on TikTok. And we have seen teen girls lured into inappropriate sexual relationships with predators on Snapchat. You are parents. How can you allow this? How can you allow this? I have learned about kids and teens who commit suicide due to bullying that they have suffered on these sites and the platforms' refusal to work with law enforcement and families to stop the harassment when asked. If it were your child, what would you do to protect your child? Does

it matter to you?

My staff has viewed abusive content featuring minors and videos of people slitting their wrists on YouTube. It is there. Yet all the while, kids and teens are flocking to these sites in increasing numbers in the platforms love it as they know that youth are a captive audience, one which will continue consuming the content that is fed to them through these algorithms, even if it puts them in danger. They are curious. They get pulled down the rabbit hole. They continue to watch. And these platforms are getting more and more data about our children. But do we know what they are doing with that data?

In the case of Facebook, we learned that they are using it to sell their products to younger and younger children, those who cannot legally use their services. But these platforms, you all know you have children on these platforms that are too young to be on these platforms and you allow it to continue because it is money—it is money in the bank. It is money in your paycheck. And obviously money trumps everything. And with some of our witnesses today, we have real reason to question how they are collecting and using the data that they get from American children and teens.

I have made no secret about my concerns that TikTok, which is owned by Beijing owned ByteDance, is paving the way for the Chinese Government to gain unfettered access to our children and teens. And TikTok, despite vague assurances that say, and I am quoting, "store data outside of China" has not alleviated my concerns in the slightest. In fact, earlier this year, they changed their

privacy policy to allow themselves to collect even more data on Americans. Now they want your face prints and voice prints in addition to your geolocation data and your keystroke patterns and rhythms.

They also collect audio that comes from devices connected to your smartphone, like smart speakers. They collect face and body attributes from videos, as well as the objects and the scenery that appear in those videos. This makes sense to some degree to create videos. But given China's propensity to surveil its own citizens, why should we trust that TikTok through ByteDance isn't doing the same to us?

Most Americans have no idea this is happening. And while they hope on the face of things to reassure us by creating U.S. based offices for their high priced lobbyists and marketing personnel, it just is not enough. We see through it all, as we will get into today. TikTok's own privacy policies give them an out to share data with ByteDance and the Chinese Communist Party. Yet most Americans have absolutely no idea if the Chinese Communist Party is getting their information.

The time has come where we must focus on what Congress can do to secure American consumers' personal data. As a mother and a grandmother, I know this is doubly important when it comes to our children. As this hearing will show, we can't afford to wait on that. So thank you to the witnesses. We look forward to your cooperation. Thank you, Mr. Chairman.

Senator Blumenthal. Thanks, Senator Blackburn. We have with us this morning Ms. Jennifer Stout, Vice President of Global Public Policy at Snapchat. Ms. Stout is the Vice President of Global Policy, and prior to Snapchat, she spent most of her career in Government working for then Senator Joe Biden and at the United States Department of State. Mr. Michael Beckerman is Vice President and Head of Public Policy at America's TikTok.

He joined TikTok in February 2020 and leads their Government relations. He was previously the Founding President and CEO of the Internet Association. We are joined by Ms. Leslie Miller, remotely, Vice President, Government Affairs and Public Policy at YouTube. Ms. Miller leads YouTube's public policy team. Previously, she served as Acting Head of Global Policy for Google. Why don't we begin with your testimony, Ms. Stout? Thank you.

STATEMENT OF JENNIFER STOUT, VICE PRESIDENT OF GLOBAL PUBLIC POLICY, SNAP INC.

Ms. Stout. Thank you, Mr. Chairman. Chairman Blumenthal, Ranking Member Blackburn, and members of the Subcommittee, thank you so much for the opportunity to be here today. My name is Jennifer Stout, and I am the Vice President of Global Public Policy at Snap. I have been in this role for nearly 5 years after spending almost two decades in public service, more than half in Congress.

I have tremendous respect for this institution and the work that you are doing to ensure that young people are having safe and healthy online experiences. To understand Snap's approach to protecting young people on our platform, it is helpful to start at the beginning. Snapchat's founders were part of the first generation to

grow up with social media. Like many of their peers, they saw that while social media was capable of making a positive impact, it also had certain features that troubled them.

These platforms encouraged people to broadcast their thoughts permanently. Young people were constantly measuring themselves by likes, by comments, trying to present a perfect version of themselves because of social pressures and judgment. Social media also evolved to feature an endless feed of unvetted content, exposing individuals to a flood of viral, misleading, and harmful information.

Snapchat is different. Snapchat was built as an antidote to social media. From the start, there were three key ways we prioritized privacy and safety. First, we decided to have Snapchat opened to a camera instead of a feed of content. This created a blank canvas for friends to visually communicate with each other in a way that was more immersive than text. Second, we embraced strong privacy principles and the idea of ephemerality, making images delete by default. Social media may have normalized having a permanent record of conversations online, but in real life, friends don't break out their tape recorder to document every conversation.

Third, we focused on connecting people who are already friends in real life by requiring that both Snapchatters opt in to being friends in order to communicate because in real life, friendships are mutual. We have worked hard to keep evolving responsibly. Understanding the potential negative effects of social media, we made proactive choices to ensure that all of our future products reflected those early values. We were influenced by existing regulatory frameworks that govern broadcast and telecommunications when developing the parts of our app where users had the potential to

reach a large audience.

Discover, which is our closed content platform and features content from professional media publishers and verified users, and Spotlight, where creators can submit creative and entertaining videos to share, are both structured in a way that does not allow unvetted content to get reach. Our design protects our audience and makes us different. When it comes to young people, we have made intentional choices to apply additional protections to keep them safe. We have adopted responsible design principles and rigorous processes that consider the privacy and safety of new features right from the beginning. We take into account the unique sensitivities of young people. We intentionally make it harder for strangers to find minors by not allowing public profiles for users under 18.

We have long deployed age dating tools to prevent minors from viewing age regulated content and ads. We make no effort and have no plans to market to young children. Individuals under the age of 13 are not permitted to create Snapchat accounts, and if we find them, we remove them. Additionally, we are developing new tools that will give parents more oversight over how their teens are using Snapchat. Protecting the well-being of our community is something we approach with both humility and determination. Over 500 million people around the world use Snapchat and 95 percent of our community says that Snapchat makes them feel happy because it connects them to their friends.

We have a moral responsibility to take into account the best interests of our users in everything we do, and we understand that there is more work to be done. As we look to the future, we believe that regulation is necessary. But given the different speeds at which technology develops and which the rate at which regulation can be implemented, regulation alone can't get the job done. Technology companies must take responsibility to protect the communities they serve. If they don't, Government must act to hold them accountable.

We fully support the Subcommittee's approach and efforts to investigate these issues, and we welcome a collaborative approach to problem-solving that keeps our young people safe online. Thank you again for the opportunity to appear today, and I look forward to answering your questions.

[The prepared statement of Ms. Stout follows:]

PREPARED STATEMENT OF JENNIFER STOUT, VICE PRESIDENT OF GLOBAL PUBLIC POLICY, SNAP INC

Introduction

Chairman Blumenthal, Ranking Member Blackburn, and members of the Subcommittee, thank you for the opportunity to appear before you today. My name is Jennifer Stout and I serve as the Vice President of Global Public Policy at Snap Inc., the parent company of Snapchat. It's an honor and privilege to be back in the Senate 23 years after first getting my start in public service as a Senate staffer, this time in a much different capacity—to speak about Snap's approach to privacy and safety, especially as it relates to our youngest community members. I have been in this role for nearly five years, after spending almost two decades in public service, more than half of which was spent in Congress. I have tremendous respect for this institution and the work you and your staff are doing to make sure that tech platforms ensure that our youth are having safe and healthy online experiences.

To understand Snap's approach to protecting young people on our platform, it's helpful to start at the beginning. Snapchat's founders were part of the first generation to grow up with social media. Like many of their peers, they saw that while social media was capable of making a positive impact, it also had certain features that negatively impacted their friendships. These platforms encouraged people to publicly broadcast their thoughts and feelings, permanently. Our founders saw how people were constantly measuring themselves against others through "likes" and comments, trying to present a version of themselves through perfectly curated images, and carefully scripting their content because of social pressure. Social media also evolved to feature an endless feed of unvetted content, exposing people to a flood of viral, misleading, and harmful content.

Snapchat was built as an antidote to social media. In fact, we describe ourselves as a camera company. Snapchat's architecture was intentionally designed to empower people to express a full range of experiences and emotions with their real friends, not just the pretty and perfect moments. In the formative years of our company, there were three major ways our team pioneered new inventions to prioritize online privacy and safety.

First, we decided to have Snapchat open to a camera instead of a feed of content. This created a blank canvas for friends to visually communicate with each other in a way that is more immersive and creative than sending text messages.

Second, we embraced strong privacy principles, data minimization, and the idea of ephemerality, making images delete-by-default. This allowed people to genuinely express themselves in the same way they would if they were just hanging out at a park with their friends. Social media may have normalized having a permanent record of conversations online, but in real life, friends don't break out their tape recorder to document every single conversation for public consumption or permanent retention.

Third, we focused on connecting people who were already friends in real life by requiring that, by default, both Snapchatters opt-in to being friends in order to communicate. Because in real life, friendships are mutual. It's not one person following the other, or random strangers entering our lives without permission or invitation.

A Responsible Evolution

Since those early days, we have worked to continue evolving responsibly. Understanding the potential negative effects of social media, we made proactive choices to ensure that all of our future products reflected those early values.

We didn't need to reinvent the wheel to do that. Our team was able to learn from history when confronting the challenges posed by new technology. As Snapchat evolved over time, we were influenced by existing regulatory frameworks that govern broadcast and telecommunications when developing the parts of our app where users could share content that has the potential to reach a large audience. For instance, when you talk to your friends on the phone, you have a high expectation of privacy, whereas if you are a public broadcaster with the potential to influence the minds and opinions of many, you are subject to different standards and regulatory requirements.

That dichotomy helped us to develop rules for the more public portions of Snapchat that are inspired by broadcast regulations. These rules protect our audience and differentiate us from other platforms. For example, Discover, our closed content platform where Snapchatters get their news and entertainment, exclusively features content from either professional media publishers who partner with us, or from artists, creators, and athletes who we choose to work with. All of these content providers have to abide by our Community Guidelines, which apply to all of the content on our platform. But Discover publisher partners also must abide by our Publisher Guidelines, which include requiring that content is fact-checked or accurate and age-gated when appropriate. And for individual creators featured in Discover, our human moderation teams review their Stories before we allow them to be promoted on the platform. While we use algorithms to feature content based on individual interests, they are applied to a limited and vetted pool of content, which is a different approach from other platforms.

On Spotlight, where creators can submit creative and entertaining videos to share with the broader Snapchat community, all content is first reviewed automatically by artificial intelligence before gaining any distribution, and then human-reviewed and moderated before it can be viewed by more than 25 people. This is done to ensure that we reduce the risk of spreading misinformation, hate speech, or other po-

tentially harmful content.

We don't always get it right the first time, which is why we redesign parts of Snapchat when they aren't living up to our values. That's what happened in 2017 when we discovered that one of our products, Stories, was making Snapchatters feel like they had to compete with celebrities and influencers for attention because content from celebrities and friends were combined in the same user interface. As a result of that observation, we decided to separate "social" content created by friends from "media" content created by celebrities to help reduce social comparison on our platform. This redesign negatively impacted our user growth in the short-term, but it was the right thing to do for our community.

Protecting Young People on Snapchat

Our mission—to empower people to express themselves, live in the moment, learn about the world, and have fun together—informed Snapchat's fundamental architecture. Adhering to this mission has enabled us to create a platform that reflects human nature and fosters real friendships. It continues to influence our design processes and principles, our policies and practices, and the resources and tools we provide to our community. And it undergirds our constant efforts to improve how we address the inherent risks and challenges associated with serving a large online community.

A huge part of living up to our mission has been building and maintaining trust with our community and partners, as well as parents, lawmakers, and safety experts. Those relationships have been built through the deliberate, consistent decisions we have made to put privacy and safety at the heart of our product design process.

For example, we have adopted responsible design principles that consider the privacy and safety of new products and features right from the beginning of the development process. And we've made those principles come to life through rigorous processes. Every new feature in Snapchat goes through a defined privacy and safety review, conducted by teams that span Snap-including designers, data scientists, engineers, product managers, product counsel, policy leads, and privacy engineers—long before it sees the light of day.

While more than 80 percent of our community in the United States is 18 or older,

we have spent a tremendous amount of time and resources to protect teenagers. We've made thoughtful and intentional choices to apply additional privacy and safety policies and design principles to help keep teenagers safe. That includes:

- Taking into account the unique sensitivities and considerations of minors when we design products. That's why we intentionally make it harder for strangers to find minors by banning public profiles for people under 18 and are rolling out a feature to limit the discoverability of minors in Quick Add (friend suggestions). And why we have long deployed age-gating tools to prevent minors from viewing age-regulated content and ads.
- Empowering Snapchatters by providing consistent and easy-to-use controls like turning location sharing off by default and offering streamlined in-app reporting for users to report concerning content or behaviors to our Trust and Safety teams. Once reported, most content is actioned in under 2 hours to minimize the potential for harm.
- Working to develop tools that will give parents more oversight without sacrificing privacy—including plans to provide parents the ability to view their teen's friends, manage their privacy and location settings, and see who they're talking to.
- Investing in educational programs and initiatives that support the safety and mental health of our community—like Friend Check Up and Here for You. Friend Check Up prompts Snapchatters to review who they are friends with and make sure the list is made up of people they know and still want to be connected with. Here for You provides support to users who may be experiencing mental health or emotional crises by providing tools and resources from experts.
- Preventing underage use. We make no effort—and have no plans—to market to children, and individuals under the age of 13 are not permitted to create Snapchat accounts. When registering for an account, individuals are required to provide their date of birth, and the registration process fails if a user inputs an age under the age of 13. We have also implemented a new safeguard that prevents Snapchat users between 13–17 with existing accounts from updating their birthday to an age of 18 or above. Specifically, if a minor attempts to change their year of birth to an age over 18, we will prevent the change as a way to ensure that users are not accessing age-inappropriate content within Snapchat.

Conclusion and Looking Ahead

We're always striving for new ways to keep our community safe, and we have more work left to do. We know that online safety is a shared responsibility, spanning a host of sectors and actors. We are committed to doing our part in concert with safety partners including our Safety Advisory Board, technology industry peers, government, and civil society. From technology-focused and awareness-raising initiatives, to research and best practice sharing, we are actively engaged with organizations dedicated to protecting minors online. We also know that there are many complex problems and technical challenges across our industry, including age verification of minors, and we remain committed to working with partners and policymakers to identify robust industry-wide solutions.

Protecting the wellbeing of Snapchatters is something we approach with both humility and steadfast determination. Over 500 million people around the world use Snapchat every month and while 95 percent of our users say Snapchat makes them feel happy, we have a moral responsibility to take into account their best interests in everything we do. That's especially true as we innovate with augmented reality—which has the potential to positively contribute to the way we work, shop, learn, and communicate. We will apply those same founding values and principles as we continue to experiment with new technologies like the next generation of augmented reality.

As we look to the future, computing and technology will become increasingly integrated into our daily lives. We believe that regulation is necessary but given the speed at which technology develops and the rate at which regulation can be implemented, regulation alone can't get the job done. Technology companies must take responsibility and actively protect the communities they serve.

If they don't, the government must act swiftly to hold them accountable. We fully support the Subcommittee's efforts to investigate these issues and welcome a collaborative approach to problem solving that keeps our society safe.

Thank you again for the opportunity to appear before you today and discuss these critical issues. I look forward to answering your questions.

Senator Blumenthal. Thanks, Ms. Stout. Mr. Beckerman.

STATEMENT OF MICHAEL BECKERMAN, VICE PRESIDENT AND HEAD OF PUBLIC POLICY, AMERICAS, TIKTOK

Mr. Beckerman. Chairman Blumenthal, Ranking Member Blackburn, and members of the Subcommittee, my name is Michael Beckerman, and I am the Vice President of Public Policy for the Americas at TikTok. I am also the father of two young daughters. I am passionate about ensuring that our children stay safe online. I joined TikTok after nearly a decade representing the Internet industry at large because I saw an opportunity to help TikTok responsibly grow from a young startup to a trusted entertainment platform.

TikTok is not a social network based on followers or social graph. It is not an app that people check to see what their friends are doing. You watch TikToks, you create on TikTok. The passion and creativity and diversity of our community has fueled new cultural trends, chart topping artists, and businesses across the country. It has been a bright spot for American families who create videos together, and I have heard from countless friends and family and even members of the Senate and your staff about how joyful and fun and entertaining and authentic TikTok content truly is.

And I am proud of the hard work that our safety teams do every single day to safeguard our community, and that our leadership makes safety and wellness a priority, particularly to protect teens on the platform. Being open and humble is important to the way we operate at TikTok. In the context of the hearing today, that means we seek out feedback from experts and stakeholders to constantly improve. When we find areas or find flaws where we can do better, we hold ourselves accountable and we find solutions.

Turning a blind eye to areas where we can improve is not part of our company's DNA. But most importantly, we strive to do the right thing, protecting people on the platform. When it comes to protecting minors, we work to create age appropriate experiences for teens throughout their development. We have proactively built privacy and safety protections with this in mind. For example, people under 16 have their accounts set to private automatically. They can't host live streams, and they can't send direct messages on our platform, and we don't allow anyone to send off platform videos, images, or links via direct messaging.

These are perhaps underappreciated product choices that go a long way to protect teens, and we made these decisions which are counter to industry norms or our own short term growth interests because we are committed to do what is right and building for the long term. We support parents in their important role to protect teens. That's why we have built parental controls called family pairing that empower a parent to link their TikTok account in a simple way from their own device of the parent to their teenager's account to enable a range of privacy and safety controls.

And I encourage all the parents that are listening to the hearing today to take an active role in your teen's phone and app use. And if they are on TikTok, please check out family pairing. Visit our youth portal, read through our Guardians guide that is on our safety center. Our tools for parents are industry leading, innovative, but we are always looking to add and improve. It is important to know that our work is not done in a vacuum.

It is critical for platforms, experts, and Governments to collaborate on solutions that protect the safety and well-being of teens. That is why we partnered with Common Sense Networks, who helps us ensure that we provide age appropriate content and our under-13 app experience. We also work closely with the National Center for Missing and Exploited Children, the National Parent Teacher Association, the Digital Wellness Lab at Boston Children's Hospital, and our U.S. Content Advisory Council.

TikTok has made tremendous strides to promote the safety and well-being of teens, but we also acknowledge, and we are transparent about the room that we have to grow and improve. For example, we are investing in new ways for our community to enjoy content based on age appropriateness or family comfort. And we are developing more features that empower people to shape and customize their experience in the app. But there is no finish line

when it comes to protecting children and teens.

The challenges are complex, but we are determined to work hard and keep the platform safe and create age appropriate experiences. We do know trust must be earned, and we are seeking to earn trust through a higher level of action, transparency, and accountability, as well as a humility to learn and improve. Thank you for your leadership on these important issues. I look forward to answering the questions of the Committee.

[The prepared statement of Mr. Beckerman follows:]

PREPARED STATEMENT OF MICHAEL BECKERMAN, VICE PRESIDENT AND HEAD OF PUBLIC POLICY, AMERICAS, TIKTOK

Chairman Blumenthal, Ranking Member Blackburn, and distinguished members of the Subcommittee, thank you for the opportunity to appear before you today to discuss how industry is working to provide a safe and secure online experience for

younger users.

My name is Michael Beckerman, and I am the Vice President and Head of Public Policy for the Americas at TikTok. Prior to joining TikTok, I was the founding President and CEO of the Internet Association, which represents leading global Internet companies on public policy issues. I also served for twelve years as a Congressional staffer, including as the Deputy Staff Director of the House Committee on Energy

and Commerce.

TikTok is a global entertainment platform where people create and watch shortform videos. Our mission is to inspire creativity and bring joy, and that mission is the foundation for our privacy and safety policies that aim to protect and promote the well-being of minors on the app. The TikTok community has ushered in a new era in user-generated content by fostering authenticity. One of the unique things about TikTok, is how our powerful yet easy-to-use tools democratize video creation, enabling everyday people to express themselves creatively and find their community on the platform. This approach has resulted in more authentic content and has helped launch new cultural trends from feta pasta to the resurgence of Fleetwood Mac's "Dreams." It has allowed small businesses to find their voice, and to expand their reach and customer base, and it has been a bright spot for American families during the Covid-19 pandemic. Parents are sharing their journeys through father-hood and motherhood, building an inclusive community for families of all backgrounds. In a *study conducted by Nielson*, TikTok was the only app where a top reason for usage was, "to lift my spirits."

Since its launch a few years ago, TikTok has experienced exponential growth, and billions of videos are being created each month. We continue to build out and strengthen our teams and technology in support of our commitment to maintain a

safe and supportive environment for our community.

We empower people who use the app with a robust set of controls to customize their individual experience, and we are constantly working to build new features that support a positive and safe environment. For example, we give people the ability to restrict who can send them direct messages (with direct messages turned off entirely for people under 16 years old), to filter out comments containing keywords they select or that otherwise may be inappropriate, to delete comments in bulk, to easily report activity that violates our policies, and to shape the type of content that they will see. We have also introduced well-being resources to support people who want to share their well-being journey in our community. Developed with input from experts, these resources—accessible in our app and on our Safety Center—provide information to support people impacted by eating disorders or struggling with thoughts of suicide or self-harm. For example, if someone searches for key terms related to suicide, self-harm, or eating disorders, we direct them to expert information and support, including the Crisis Text Line, National Suicide Prevention Lifeline, and the National Eating Disorders Helpline.

We recognize that childhood and adolescence are transformative phases of life. In the United States, we have two separate experiences: TikTok for Younger Users for children under 13 years old, and TikTok for those at least 13 years of age. We have proactively implemented privacy and safety protections to promote the well-being of children and teenagers, and we continue to work on changes to support age-appropriate experiences on our platform. We understand and respect adolescents' desire and need for greater autonomy, but we also appreciate that they are still learning and growing, which is why our product is designed to be sensitive to the differing

developmental stages of childhood, adolescence, and adulthood.

Our goal of providing an age-appropriate experience for our younger users starts with a neutral, industry-standard age screening, which requires individuals creating an account to provide their birthdate. However, our commitment to enforcing our minimum age requirement does not end with age screening. We take additional actions to identify and remove suspected underage account holders from the TikTok platform. For example, we train our safety moderation teams to be alert to explicit admissions that an account may belong to someone under the age of 13. We also use other information, such as keywords or user reports, to help identify potential underage accounts. If, after reviewing all relevant information, our safety team determines that an account may belong to an underage person, we will suspend and remove the account. As part of our commitment to transparency and accountability, since the first quarter of 2021, we have provided reports about our removal of suspected underage accounts, which totaled more than 11 million removals between April and June 2021. We are proud to be an industry leader in making these disclosures.

TikTok for Younger Users

In the United States, if an individual registers for TikTok as under the age of 13, they are directed to *TikTok for Younger Users*, a curated viewing experience with stringent safeguards and privacy protections designed specifically for people under 13. In TikTok for Younger Users, youth can experience and make fun, creative, and even educational videos on their device. However, they cannot post videos on the platform, comment on others' videos, message with others, or maintain a profile or followers. No advertisements are shown in the under 13 experience.

Earlier this year, we announced a partnership with Common Sense Networks as part of our ongoing efforts to improve upon the TikTok for Younger Users experience. Through our partnership, Common Sense Networks is providing additional guidance on the appropriateness of content for children under 13, thus strengthening our work to create an entertaining yet safe viewing environment for our

younger audience.

Our Approach to Teen Safety and Privacy

Teens who are at least 13 years old can use the main TikTok platform. Today's youth are growing up in a media world and to help them safely manage their digital spaces, we provide them with age-appropriate privacy and safety settings and controls. The privacy and safety settings TikTok has developed, reflect careful consideration of not only the differences between children and teenagers, but also within the

13–18 teenage group.

Our Minor Safety team holds a high bar of rigor for developing policy. We are staffed with experts from the fields of adolescent development, prevention science, and child protection. Our policies are informed by peer-reviewed academic literature and ongoing consultation with external scholars. TikTok works with leading youth safety and well-being experts, as well as adolescent psychologists to inform our approach, including the Family Online Safety Institute, National Parent-Teacher Association, Common Sense Networks, and the Digital Wellness Lab at Boston Children's Hospital. We seek out feedback, research, and best practices from such experts and organizations, and we use this information to help us design TikTok in way that considers and supports the unique needs of teens. Based on input from these experts and published research in this space, we have adopted a nuanced, age-

appropriate approach that distinguishes between early teens (age 13–15) and late teens (16–17), which is reflected in our teen-related privacy and safety settings as discussed below.

Family Pairing and Parental Oversight

TikTok is committed to providing parents and guardians visibility into, and control over, how their teenagers use the app. Parents and guardians are critical partners in ensuring the safety of teens. They cannot do it alone and neither can we. We are continuously looking for ways to involve parents and guardians in their teen's experience on our platform. To that end, in 2020, TikTok unveiled our Family Pairing features, which empower parents or guardians to customize privacy and safety settings for their teenage users, which we continue to improve in consultation with youth and family safety experts. We are pleased to see some of the other platforms exploring similar features to give more meaningful choice and tools to parents

Family Pairing allows a parent or guardian to link their account (from the parent's device) with their teenager's account and enable privacy and safety controls. Through Family Pairing, parents can choose from the following settings:

- Screen Time Management: Parents can decide how long their teen can spend on TikTok each day. Parents can do this directly from their own accounts on their personal device.
- Restricted Mode: Parents can help limit the appearance of content that may not be appropriate for all audiences.
- Search: Parents can decide whether their teen can search for content, accounts, hashtags, or sounds.
- Discoverability: Parents can decide whether their teen's account is private (in which case the teen decides who can see their content) or public (in which case anyone can view their content). While under 16 accounts are private by default, this feature adds a layer of parental oversight.
- Suggest Account to Others: Parents can decide whether their teen's account can be recommended to others.
- *Direct Messages*: Direct message is not available for teens under age 16. For teens aged 17–18, parents may restrict who can send messages to their teen's account or turn off direct messaging completely.
- Liked Videos: Parents can decide whether anyone can view the videos that their teen likes.
- Comments: Parents can decide whether anyone can comment on their teen's vid-

Even when Family Pairing is not enabled, teens themselves can always take advantage of these tools by selecting them individually through TikTok's Digital Wellbeing setting. While parents and their teens should remain in control of deciding what is right for their family, our hope is that our Family Pairing features will encourage families to have important conversations about digital safety and wellbeing.

In addition to Family Pairing, we recently launched an updated Guardian's Guide to provide an overview of TikTok and the variety of tools and controls we have built into the product to keep our community safe. The guide also provides general information on common Internet safety concerns for families.

We also developed a guide for the *National PTA* to provide families and educators with a comprehensive overview of the TikTok app and the safety tools and resources available to create age-appropriate experiences on the platform. The guide was sent to dozens of schools around the country and was published in a U.S. Department of Education newsletter.

Privacy and Safety by Default

The privacy and safety of our teenage users is our priority. To that end, we have implemented numerous privacy settings and controls that reflect our commitment to provide our teenage users with a positive, safe, and age-appropriate experience, including the following:

- Private Accounts: The default setting for all TikTok accounts of teens under 16 is set to "private." That means that only the accounts that the teen approves can follow them and watch their videos.
- Suggest Your Account to Others: The "suggest your account to others" feature is disabled by default for teens under 16. This means the teen's account will not be suggested to other users unless the teen changes the setting to "on."

- Direct Messages: Direct messaging is automatically disabled for users under 16. For older teenage accounts (16–17), their direct messaging setting is set to "No One" by default. We do not allow anyone, regardless of age, to send off-platform videos, images, or links via direct messaging. We made this decision to further protect teens from exploitation, bullying or other unwanted communications, as studies have shown that this type of content is spread via private messaging.
- · Livestreaming: Livestream hosting is disabled for teens under 16.
- Comments: Teens under 16 can allow Friends (followers who the teen follows back) or "No One" to comment on their videos; the Everyone comment function is not available for under 16 teens.
- *Video Downloads:* The ability to download videos created by teens under 16 is disabled. For teens between 16–17, the default setting in this feature is set to Off. If teens aged 16–17 choose to turn the download feature on, they will receive a pop-up asking them to confirm their choice that others can download their videos.
- *Duet/Stitch:* The "Duet" function allows users to react, contribute to, or sing along with another user's video. Users can also "Stitch," which allows a user to clip a portion of another user's video to include as part of their own video. Duet and Stitch are disabled for teens under 16, whereas the default setting for teens 16–17 is set to Friends.
- Gifting: Users must be 18 or over to buy, send, or receive virtual gifts during Livestreams

Building on these age-appropriate protective measures, and in keeping with developments in the global privacy landscape, we recently have introduced new settings:

- We have added a pop-up that appears when teens under 16 are ready to publish their first video, asking them to choose who can watch the video. They will not be able to publish their video until they make a selection.
- We have provided additional context to help teens aged 16–17 understand how downloads work, so they can choose the option that is most comfortable for them. If they opt to turn the feature on, they will now receive a pop-up asking them to confirm that choice before others can download their videos.
- When someone aged 16–17 joins TikTok, their Direct Messaging setting will be set to "No One" by default. To message others, they will need to switch to a different sharing option. Existing accounts that have never used direct messaging before will receive a prompt asking them to review and confirm their privacy settings the next time they use this feature.
- Accounts for age 13–15 teens will not receive push notifications from 9 p.m., and accounts for age 16–17 teens will have push notifications disabled starting at 10 p.m.

Preventing Bullying and Harassment

TikTok stands against bullying and harassment in any form. We continue to look for ways to promote open and respectful discussion while prohibiting inappropriate and harmful comments on our platform. We launched #CreateKindness, a global campaign and a creative video series aimed at raising awareness about online bullying and encouraging people to choose to be kind toward one another. The campaign has already received more than one billion views.

Bullying and harassment are violations of our Community Guidelines, and when we see such content and behavior, we take action. To further help foster kindness in our community, we have rolled out the following features this year:

- A prompt asking people to reconsider posting unkind or inappropriate comments.
- Two features that give users more control over the comments on their videos:
 - With our new Filter All Comments feature, users can decide which comments will appear on their videos. When enabled, comments are not displayed unless the creator approves them using the comment management tool. This feature builds on our existing collection of comment controls that allow people to automatically filter spam, offensive comments, and specific keywords.
 - We have also introduced the ability to delete multiple comments at once or report them for potentially violating our Community Guidelines. Accounts that post bullying or other negative comments can now be blocked in bulk, up to 100 at a time.

In addition, we work to educate teens and families about bullying prevention. We recently launched a *bullying prevention guide* on our *Safety Center* to help teens, parents and guardians, and educators learn about the issue and settings that can help prevent bullying on our platform.

Combatting Child Exploitation

TikTok is firmly committed to protecting the safety of our community, and we take a zero-tolerance approach to all forms of child sexual exploitation and abuse (CSEA), including child sexual abuse material (CSAM). We continually monitor, update, and reinforce our efforts to stop the creation and sharing of CSAM. TikTok has a dedicated investigations group within our Trust & Safety team focused on detecting emerging trends and patterns regarding child exploitation and abuse as part of our efforts to keep our platform safe. TikTok adheres to the Voluntary Principles to Counter Online Child Sexual Exploitation and Abuse, which provide a framework that can be consistently applied across sectors and services to respond to changing societal and offending behaviors and reduce risks for users.

TikTok's efforts to thwart CSAM and child exploitative content is premised on the three P's: Policies, Product, and Partners.

- Policies: The threat posed by CSAM and child exploitative content remains a global challenge that requires collaboration with academic experts, child safety groups, industry organizations, and governments. TikTok's global Trust & Safety teams are comprised of experienced professionals whose backgrounds span product, policy, compliance, child safety, law, and privacy. Trust & Safety leaders collaborate closely with regional regulators, policymakers, governments, and law enforcement agencies to promote the highest possible standard of user safety. Our Los Angeles-based Trust & Safety team is responsible for developing and enforcing moderation policies and strategies in the United States.
 - TikTok's Community Guidelines prohibit content that depicts or disseminates child abuse, child nudity, or the sexual exploitation of children. When we become aware of such content, we take immediate action to remove the violative content, terminate the pertinent accounts, and, where appropriate, report cases of CSAM to the National Center for Missing and Exploited Children (NCMEC) and other law enforcement agencies. In 2020, TikTok made 22,692 reports regarding CSAM and child exploitative content to NCMEC's CyberTipline.
- TikTok's multifaceted strategy to combat CSAM and child exploitative content employs both human-centered moderators as discussed below, as well as machine-based moderation tools such as photo-identification technology. Additionally, we filter red-flag language and share information with NCMEC about situations that may indicate grooming behavior, according to their policies and industry norms.
- Product: TikTok does not allow off-platform videos, images, or links to be sent through direct messages or comments to videos. This was a deliberate decision we made, supported by relevant studies, and helps to close off a potential vector for the propagation and dissemination of CSAM and child exploitative content. We provide in-app reporting mechanisms to ensure users can report content that violates our Community Guidelines, including content that violates our minor safety rules. Finally, for our under 13 users, we have implemented additional restrictions and safeguards in TikTok for Younger Users to help guard against the risks of CSAM and child exploitative content.
- Partners: TikTok leverages the expertise of child safety organizations, including the Family Online Safety Institute, ConnectSafety, National PTA, Cyberbullying Research Center, Boston Children's Hospital's Digital Wellness Lab, Internet Watch Foundation, NCMEC to continually assess and enhance our minor safety policies and product features. We also recently joined the Technology Coalition, a global alliance of leading Internet companies, to work collaboratively toward solutions that protect children from online sexual exploitation.

Content Moderation and Dangerous Challenges

Content moderation policy and implementation for the United States is led by our U.S. Trust and Safety team in Los Angeles, with the goal of developing equitable policies that are transparent and can be consistently enforced.

We solicit a diverse range of feedback from external experts in digital safety and human rights, including members of our *Content Advisory Council*. We also work with accredited and independent fact-checking organizations that help us assess the veracity of content, such as *Lead Stories* or *Science Feedback*, so that we can take the appropriate action in line with our Community Guidelines. We greatly value our collaboration with independent researchers on industry-wide challenges, which

helps strengthen how we enforce our policies to keep our platform safe and welcoming.

Our Community Guidelines are designed to foster a safe environment that nourishes creativity, and we rely on our community members to responsibly honor these parameters. We strictly prohibit dangerous acts and challenges on our platform and work to aggressively remove videos and hashtags that promote such behavior. TikTok has even stricter policies when it comes to inappropriate content featuring minors. Our policies prohibit any content that depicts or promotes activities that may jeopardize youth well-being, including physical challenges, dares, or stunts.

While we do not condone any harmful, dangerous, or criminal behavior, we under-

stand that some individuals may nevertheless decide to post such content. We aggressively look to remove such content and related hashtags as soon as possible. To educate our community about the dangers of such behavior, TikTok has partnered

with creators to raise awareness against these dangerous challenges.

Unfortunately, "dangerous challenges" are often sensationalized in the traditional media and can go "viral" in news accounts or from tweets by public officials, even when they are not actually appearing on the app. With regards to reports of scheduled challenges on TikTok, as a prominent disinformation researcher who focuses on TikTok recently pointed out: "When I looked into this, I could not find a single TikTok actually endorsing this behavior. All evidence indicates this is a hoax turned into reality by local news and school districts reacting to completely unconfirmed rumors." A number of news reports have surfaced that many of the alleged challenges are in fact hoaxes that originated on another platform and were never on TikTok at all.

We recently saw content related to "devious licks" gain traction on TikTok and other platforms. Our moderation teams worked swiftly to remove this content and redirect hashtags and search results to our Community Guidelines to discourage such behavior. We issued specialized guidance to our teams on this violative content and proactively detected and removed content, including videos, hashtags, and audio associated with the trend. Additionally, our teams are continuously staying alert to emerging violative content as well as new variations of spellings for hashtags relating to challenges. To help reach schools and parents, we actively worked with National PTA throughout this cycle to explain our diligent actions and reach families with messages that support ongoing, open conversations about digital safety and etiquette with their teens to ensure they are using social media productively and responsibly. As part of our PTA Connected initiative, National PTA has teamed up with TikTok to develop a guide that provides parents and guardians with information about TikTok, digital safety, and how they can help ensure their teens are using technology productively and responsibly.

Transparency into Enforcement of Minor Safety Rules

TikTok aims to be transparent and accountable when it comes to minor safety. We publish a quarterly Transparency Report that discloses the metrics related to violative content that we remove pursuant to our Community Guidelines. This includes data about content that violates our minor safety rules, as well as how quickly we detect and remove such content. In the second quarter of 2021, for example, 41.3 percent of content removed violated our minor safety policies. Of those videos, 97.6 percent of videos were removed before they were reported to us, and 95.4 percent of videos were removed within 24 hours of being posted. This continued improvement in proactive detection is the result of our efforts to improve our policies and procedures that work to identify and flag violative content early on, before it is even viewed.

Conclusion

There is no finish line when it comes to protecting children and teens. The challenges are complex and constantly evolving, but with humility and determination, we are working hard to build upon our work to keep our platform safe for everyone, especially children and teens. It truly does take a village to keep minors safe online, and we will continue to work with teenagers, parents, child safety experts and organizations, policymakers, and other interested stakeholders to continue to improve and do better. Thank you for your time and consideration.

Senator Blumenthal. Thanks, Mr. Beckerman. Ms. Miller, I hope you are with us. Please proceed.

STATEMENT OF LESLIE MILLER, VICE PRESIDENT, GOVERNMENT AFFAIRS AND PUBLIC POLICY, YOUTUBE

Ms. MILLER. Sorry, I was—I think I am having a bit of technical difficulty. Can you hear me OK?

Senator Blumenthal. We can hear you and now we can see you.

Thanks.

Ms. MILLER. OK, wonderful. Thank you. Chairman Blumenthal, Ranking Member Blackburn, and distinguished members of the Subcommittee, thank you for the opportunity to appear before you today. My name is Leslie Miller, and I am the Vice President of Public Policy at YouTube. As young people spend more time online and given their changing needs as they grow up, it is crucial to put in place protections that allow them age appropriate access to information.

We do this by investing in the partnerships, technologies, and policies that create safer environments that allow children to express their imagination and curiosity and empower families to create the right experiences for their children. Our internal teams include experts who come from child development, child psychology, and children's media backgrounds. They work closely with the product teams to ensure that product design reflects an understanding of children's unique needs and abilities, and how they evolve over time.

The advice from trusted experts informs our ongoing improvements for YouTube Kids and our child safety policies. Our child safety policy—our child safety specific policies, which I describe in greater detail in my submitted testimony, prohibit content that exploits or endangers minors on YouTube. Using a combination of machine learning and human reviewers across the globe, we commit significant time and resources to removing this harmful content as quickly as possible.

Between April and June of this year, we removed nearly 1.8 million videos for violations of our child safety policies, of which about 85 percent were removed before they had 10 views. We are constantly working to improve our safeguards. We have also invested significant resources to empower parents with greater control over

how their children view content on YouTube.

In 2015, we created YouTube Kids as a way for kids to more safely pursue their curiosity and explore their interests while providing parents more tools to control and customize the experience for their families. Videos on YouTube Kids include popular children's videos, diverse new content, and content from trusted partners. After we launched YouTube Kids, we heard from parents that tweens have different needs, which weren't being fully met by our products.

That is why we have worked with parents and experts across the globe in areas related to child safety, child development, and digital literacy to develop a solution for these parents, which we called supervised experiences. We launched this earlier this year on the

main YouTube platform.

Parents now have the option of choosing between three different content choices, content generally suitable for viewers aged 9 plus, or 13 plus, and then most of YouTube. The most of YouTube option excludes all age restriction—age restricted content on the main

platform. We want to give parents the controls that allow them to make the right choices for their children. On YouTube Kids and even on YouTube for all underage users, auto play is off by default. In the coming months, we will be launching additional parental controls in the YouTube Kids app, including the ability for a parent to choose a locked default auto play setting.

Our take a break reminders and bedtime settings are also on by default in these experiences. YouTube treats personal information from anyone watching children's content on the platform as coming from a child, regardless of the age of the user. This means that on videos classified as made for kids, we limit data collection and use, and as a result, we restrict or disable some product features.

For example, we do not serve personalized ads on this content on our main YouTube platform, and we do not support features such as comments or live chat. And to be clear, we have never allowed personalized advertising on YouTube Kids or YouTube supervised

experiences.

There is no issue more important than the safety and well-being of our kids online, and we are committed to working closely with you to address these challenges. I again would like to thank you for the opportunity to appear today and look forward to answering your questions.

[The prepared statement of Ms. Miller follows:]

PREPARED STATEMENT OF LESLIE MILLER, VICE PRESIDENT, GOVERNMENT AFFAIRS & PUBLIC POLICY, YOUTUBE

Introduction

Chairman Blumenthal, Ranking Member Blackburn, and distinguished members of the subcommittee: thank you for the opportunity to appear before you today. My name is Leslie Miller, and I am the Vice President of Public Affairs and Public Policy at YouTube.

In my role, I lead a diverse and global team that advises the company on public policy issues around online, user-generated content, supporting YouTube's mission to "give everyone a voice and show them the world." Central to our work is our commitment to responsibility—and nowhere is this more important than when it comes

to protecting kids and teens.

As young people spend more time online, and given their changing needs as they grow up, it's crucial to put in place protections that also allow them age-appropriate access to information. We do this by investing in the partnerships, technologies, and policies that create safer environments that allow children to express their imagination and curiosity and empower families to create the right experiences for their children. At the same time, we recognize the potential risks that children may face online, and have invested extensively in industry-leading machine learning tech-

nologies that identify potential harms quickly and at scale.

Our internal teams include experts who come from child development, child psychology and children's media backgrounds. They work closely with the product teams to ensure that product design reflects an understanding of children's unique needs and abilities and how they evolve over time. We also work extensively with external experts in online safety, content quality, mental health, trauma, digital literacy and child development; this collaboration is essential to ensure we have the best information and evidence available to address new and emerging challenges kids may face online. The advice from trusted experts informs our on-going improvements to YouTube Kids and our child safety policies, and was instrumental in the recent creation of YouTube Supervised Experiences, our new option for parents of teens and tweens on our main YouTube platform. We are grateful for how these collaborations have informed how we can build and refine our products and policies to keep kids safe on YouTube.

In my testimony today, I will (1) describe our responsibility framework and how it applies to child safety, (2) provide an overview of YouTube Kids and the YouTube Supervised Experiences, (3) describe our child safety policies, and (4) explain how

we encourage the development of healthy technology use.

YOUTUBE RESPONSIBILITY FRAMEWORK

Responsibility is our number one priority at YouTube, and nowhere is that more important than in our work around kids. Some speculate that we hesitate to address problematic content or ignore the well-being of youth online because it benefits our business; this is simply not true. Ensuring the safety of children is not only the right thing to do, it also helps us to earn the trust of parents, who see that we are building a safe environment for kids and families. It helps us reassure our advertising partners that their brands are safe on YouTube; responsibility is good for business. We have made significant investments over the past few years in policies, technology, and teams that help provide kids and families with the best protections possible. Our approach towards responsibility involves 4 "Rs" of responsibility described in detail below.

Remove

YouTube uses a combination of machine learning and human review to enforce our policies and we regularly report on the content removed for violating our policies in our quarterly *Community Guidelines Enforcement Report*.

We have clear *policies*, that I will describe in great detail in a later section, that prohibit content that exploits or endangers minors on YouTube and we have committed significant time and resources toward removing violative content as quickly as possible. We use a combination of machines and humans to enforce our policies. Machine learning is well-suited to detect patterns, which helps us to find content similar to other content we've already removed, even before it's ever viewed. Expert human review allows us to appreciate context and nuance when enforcing our policies. Between April and June (Q2) of this year we removed 1,874,729 videos for violations of our child safety policies, of which approximately 85 percent were removed before they had 10 views.

We have also seen a significant decline in a metric known as the Violative View Rate (VVR). This metric is an estimate of the proportion of video views that violate our Community Guidelines, to include our child safety policies but excluding spam, in a given quarter. Our data science teams have spent more than two years refining this metric, which we consider to be an important indicator in measuring the effectiveness of our efforts to fight and reduce abuse on YouTube. In Q2 of 2021, YouTube's VVR was 0.19–0.21 percent, meaning that out of every 10,000 views on YouTube, 19–21 are views of content that violates any of our Community Guidelines. This reduction is due in large part to our investments in machine learning to identify potentially violative content at scale. We expect to continue to reduce this metric over time.

Raise Authoritative Content & Reduce Visibility on Borderline Content

Over the last few years, we've worked with child development specialists to provide guidance to YouTube creators on how to create high-quality content for children. As a result of extensive consultations on children's media, digital learning, and the study of good citizenship, we established a set of *quality principles* to help guide our kids and family creator ecosystem. These principles include content that demonstrates or encourages respect and healthy habits, such as being a good friend, content that is thought-provoking or imaginative, such as arts and crafts activities, and content that celebrates and encourages diversity and inclusion.

These principles help determine what content is included in YouTube Kids. We also use these principles to determine which high-quality content we raise up in our recommendations on YouTube. This means that when you're watching content for kids and families on YouTube, we aim to recommend videos that are age-appropriate, educational, and inspire creativity and imagination.

At the same time, we use these principles to reduce kids content that is low-quality (but doesn't violate our *Community Guidelines*) in our recommendations on YouTube, and remove channels from YouTube Kids. Examples of this content include videos that are heavily commercial or promotional, or encourage negative behaviors or attitudes. Our work here is ongoing and we regularly reevaluate and update our systems and policies.

Reward Trusted Creators

We set a higher bar for what channels can make money on YouTube. In addition to our Community Guidelines, creators also need to follow our *monetization policies* to join the YouTube Partner Program (YPP), which allows creators to monetize their videos. Every channel applying to YPP undergoes review by a trained rater to make sure it meets our policies and we continually keep these guidelines current. We also regularly review and remove channels that don't comply with our policies.

Earlier this month, we shared additional monetization policies—which align with the quality principles discussed above—for channels that primarily create kids and family content on YouTube. Going forward, these principles will have not only an impact on recommendations and inclusion in YouTube Kids, but also on monetiza-

Channels that primarily target young audiences need to deliver high-quality content and comply with kids-specific monetization policies. For example, channels that have predominantly low-quality kids content may be suspended from YPP. If an individual video violates these quality principles, it may see limited or no ads.

YOUTUBE KIDS & YOUTUBE SUPERVISED EXPERIENCES

In 2015, we created YouTube Kids as a way for kids to more safely explore their interests and curiosity while providing parents more tools to control and customize the experience for their families. Videos on YouTube Kids include popular children's videos, diverse new content, and content from trusted partners. Our approach to devideos, diverse new content, and content from trusted partners. Our approach to determining eligibility in YouTube Kids is to first identify a very small subset of channels that have a low likelihood of uploading inappropriate content from the full YouTube corpus of content that is available. A channel must meet our high-confidence criteria, such as the general absence of unsuitable themes (e.g., shocking or scary themes), spammy behavior, and unsafe or unhealthy content (e.g., glamorizing negative habits or unseemly behavior). SciShow Kids or Art for Kids Hub are good examples of channels that fit these criteria. This approach, which is intended to ensure high-quality and appropriate content is available for viewing, significantly nar-

sure nign-quanty and appropriate content is available for viewing, significantly narrows the universe of content that then must pass further machine-learning and human review based on the content safety policy guidelines.

Because each child is unique, we also give parents the ability to fully customize what their kids watch. For example, parents can block a video or channel, can handpick which videos to make available for their kids, and also have an option to only allow content selected by trusted partners like PBS Kids and UNICEF.

Our engineering and human reviewer teams continuously work together to ensure that these filters are working as intended, and that content is appropriate for chilthat these filters are working as intended, and that content is appropriate for children. Machine learning systems work to proactively detect violations, while human reviewers around the world quickly remove violations detected by the system or flagged by users. We are constantly working to improve our safeguards and offer more features to help parents create the right experience for their families.

After we launched YouTube Kids, we heard from parents of older children that tweens and teens have different needs, which weren't being fully met by our prod-

ucts. That is why we've worked with parents and experts across the globe in areas related to child safety, child development, and digital literacy to develop a solution

for parents of tweens and teens, which we call Supervised Experience.

Supervised Experience launched in March 2021 on the main YouTube platform. Parents now have the option of choosing between three different content choices, content generally suitable for viewers aged 9+ or 13+ and then the 'Most of YouTube' option. 'Most of YouTube' excludes all age-restricted content (18+) on the main platform. To be clear, kids under 13 who are not in a Supervised Experience are not allowed on YouTube. We took action on more than 7M accounts the first 3 quarters of 2021 when we learned they may belong to a user under the age of

13—3M of those in Q3 alone as we have ramped up our automated removal efforts. When a parent opens a supervised Google account, their child's experience feels much like regular YouTube, but certain features are disabled for younger audiences. For example, we don't serve personalized ads. We also have clear guidelines that prohibit certain types of advertising on Supervised Experiences, which include ads related to weight loss and diets or ads for dating sites. YouTube supervised experiences also have disabled in-app purchases, as well as features such as uploading

videos or livestreams and reading or writing comments.

To help parents understand more about the YouTube Supervised Experience, we developed this guide, building on Google's successful Be Internet Awesome digital literacy resources, and in partnership with the National PTA, Parent Zone UK and other leading experts. We will continue to partner with these and other groups to provide easy to use resources specifically for parents to help them keep their kids safe online.

CHILD SAFETY POLICIES

YouTube has long had policies that prohibit content that endangers the emotional and physical well-being of minors. We remove content that could cause minor participants or viewers emotional distress, content showing a minor participating in dangerous activities or encouraging minors to do dangerous activities, and content

that involves cyberbullying or harassment involving minors. We also remove sexually explicit content featuring minors and content that sexually exploits minors, and report this content to the National Center for Missing and Exploited Children. In

the first half of this year YouTube made over 120,000 such reports.

YouTube also has policies prohibiting content that promotes *suicide or self-harm*. We remove content promoting or glorifying suicide, content providing instructions on how to self-harm or die by suicide and content containing graphic images of selfharm posted to shock or disgust viewers. The Stanford Internet Observatory 1 recently highlighted how we handle searches related to self-harm and suicidal ideation, writing that they were "impressed that YouTube's Community Guidelines on suicide and self-injury provide resources, including hotlines and websites, for those having thoughts of suicide or self-harm, for 27 countries."

Sometimes content doesn't violate our policies, but it may not be appropriate for viewers under 18. In these cases, we may place an age-restriction on the video. Age-restricted videos are not viewable to users who are under 18 years of age or signed

In addition to these specially designed policies, YouTube treats personal information from anyone watching children's content on the platform as coming from a child, regardless of the age of the user. This means that on videos classified as "made for kids", we limit data collection and use, and as a result, we restrict or disable some product features. For example, we do not serve personalized ads on this content on our main YouTube platform and we do not support features such as comments, live chat, notification bell, stories, and save to playlist. To be clear, we have never allowed personalized advertising on YouTube Kids or YouTube's Supervised

Experience.

Our efforts to protect children go beyond our platform, and include our efforts to enable others in industry to better protect children as well. In 2015, we introduced enable others in industry to better protect children as well. In 2015, we introduced CSAI Match—a proprietary technology developed by our teams that detects and removes child sexual abuse imagery—or CSAI—online. CSAI content is given a unique digital fingerprint, which is then used to detect duplicate copies across our platforms, and matched against a list of known fingerprints. While existing technologies like PhotoDNA, which focused on still images, CSAI Match was and is industry leading in its focus on identifying CSAI in video. CSAI Match is also resistant to manipulation, so it dramatically increases the number of violative videos that can be detected. With hundreds of hours of content uploaded every minute, CSAI Match helps us to quickly identify and remove known CSAI at scale.

We share CSAI Match technology with the industry, free of charge, and have partnered with companies and NGOs, including some on this panel today, as well as Adobe, Reddit, and Tumblr, allowing them and others to prevent the distribution

of these videos on their platforms as well. Once CSAI Match is integrated, it can help our industry partners quickly identify harmful content, minimizing the number of people exposed to it and better safeguarding the privacy of victims of CSAI. We're

committed to expanding our partnerships to help prevent the spread of this abusive material, both on and off our platform, on a global scale.

We recognize that protecting children from abuse is a mission that no one company, industry or part of society, can accomplish alone. We were proud to have been part of the group of companies who contributed our expertise to the Five Country Ministerial Forum in developing the *Voluntary Principles to Counter Online Child Sexual Abuse and Exploitation*. These principles provide an ambitious roadmap for companies of all sizes and stages of development to identify, prevent and report

We also partner with others through the *Technology Coalition*—an organization made up of 24 members representing different parts of the industry. Through the Technology Coalition we work with stakeholders around the world to help advance cutting-edge research, technology innovation, and sharing of knowledge and because the property detects and report shill gave a basic place. practice on how to prevent, detect and report child sexual abuse and exploitation. The Tech Coalition recently *announced* the funding of five global research projects to help increase our understanding and awareness of how to use artificial intelligence to combat child sexual exploitation at scale.

DIGITAL WELLBEING

The relationship between technology use and physical and mental wellbeing is complex, especially for children and young people. Recent studies have highlighted that digital media use can help teens communicate with peers and family, seek helpful resources if they are experiencing distress, and find opportunities for learn-

¹ https://cyber.fsi.stanford.edu/io/self-harm-policies-report

ing and entertainment that can help combat isolation. $^{2\ 3\ 4}$ Original content like the *Workout Badges* helps encourage playful movement even when kids are stuck at home. These are opportunities that have become even more important to young people and families during COVID–19, when organizations as diverse as ministries of education to local churches have used YouTube to help families stay connected.

Fostering a sense of wellbeing on and offline is incredibly important to us. We do this by highlighting content that helps kids learn, play and do, encouraging them to be mindful of the time they spend on screens. As described earlier, we prioritize content that helps kids stay safe and healthy, and understand the world around them. For example we have featured content in YouTube Kids that help kids learn about how viruses are spread, or videos that prepare them to return to school.

We also create tools, built into our systems, that help kids and their parents set healthy limits. For teens and for those in our YouTube Supervised Experience and in YouTube Kids, autoplay is now off by default. We've also added an autoplay option on YouTube Kids and turned autoplay off by default in the app. In the coming months, we'll be launching additional parental controls in the YouTube Kids app, including the ability for a parent to choose a "locked" default autoplay setting. Our "Take a Break" reminders and bedtime settings are also on by default in these experiences. In addition, we have worked with creators to develop a series of *PSAs* to help children reflect on the time they spend online, and build empathy for others.

CONCLUSION

There is no issue more important than the safety and wellbeing of our kids online, and we are committed to working closely with you to address these challenges. I again would like to thank you for the opportunity to appear today and look forward to answering your questions.

Senator Blumenthal. Thanks, Ms. Miller. We are going to do 5 minute rounds. We have votes at 11 o'clock, we have three votes, but I think we will be able to juggle the questioning and the testimony, and if necessary, we will take a short recess. Let me begin, as you know, by now, in August, Senator Blackburn and I wrote to Facebook asking whether they had done any research, whether they had any facts that showed harm to children.

In effect, they denied it, they dodged the question. They disclaimed that Instagram is harmful to teens. Let me ask you, and I think it is pretty much a yes or no question, the same question that we asked Facebook, have any of your companies conducted research on whether your apps can have a negative effect on children's or teen's mental health or well-being, and whether your apps promote addiction like these? Have you done that research? Ms. Stout?

Ms. Stout. Senator, we have conducted research. Much of our research is focused on our products and how we can improve our products and services to really meet the needs of our users and our community. And as I mentioned in my opening testimony, some of the research that we did shows that 95 percent of users say that Snapchat makes them happy.

Senator Blumenthal. Will you make that research available to the Subcommittee?

Ms. Stout. Yes, Senator, we would.

Senator Blumenthal. Mr. Beckerman.

Mr. Beckerman. Senator, thank you for the question. We believe that research should be done in a transparent way, and for us, we

https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/
https://www.commonsensemedia.org/research/coping-with-covid19-how-young-people-use-

digital-media-to-manage-their-mental-health

*https://www.commonsensemedia.org/sites/default/files/uploads/pdfs/tweens-teens-techand-mental-health-full-report-final-for-web1.pdf

partner with external experts and stakeholders to get their feedback. And we think that is something that everybody can work together on. And additionally, we have actually supported passage of the Camera Act, which would have additional funding at NIH, and we would love to see this done in an external way, in a transparent way.

Senator Blumenthal. Ms. Miller.

Ms. MILLER. Yes, Senator, we work with experts to leverage their insights and research to make sure that our product and policy decisions are the last the residual to the res

cisions are up to date based on their insights.

Senator BLUMENTHAL. Now, I have asked whether the research has been done that could show negative effects or addictive like impacts. You have all indicated that you have done that research, and Ms. Stout has indicated that her company will make it available. I am assuming Mr. Beckerman, you—your company will. You are nodding. And Ms. Miller?

Ms. MILLER. Yes, Senator, we have published some research and

we would make additional available.

Senator Blumenthal. Let me add—ask now about the black box algorithms. As you know, these algorithms exist, they function to drive sometimes toxic content at kids. More of it and more extreme versions of it. The consequences are potentially catastrophic, but the companies are in effect, grading their own homework. They are evaluating their own effects on kids when it comes to addiction and harms.

Let me ask you a similar question, do you provide external independent researchers with access to your algorithms, data sets, and data privacy practices? In other words, if an academic researcher comes to you on child psychology and wants to determine whether one of your products causes teen mental health issues or addiction, could they get access to raw data from you without interference? Ms. Stout?

Ms. Stout. So, Senator, I think it is important to remember that on Snapchat, algorithms work very differently. Very little of our content is sorted algorithmically—

Senator Blumenthal. Well, I am going to apologize because I am going to interrupt just to say, the question is about access to independent researchers on those algorithms that you do use. And there is no question that you have algorithms, correct?

Ms. Stout. Correct, Senator. We do have algorithms, but they just operate very differently. To your question on whether we have had any requests for outside researchers or mental health specialists to come and access that, to my knowledge, we have not, Senator.

Senator Blumenthal. But you would provide access to them?

Ms. Stout. Yes, I think it is important to understand that algorithms for us just operate differently. So it is—to compare them against different platforms just would mean very different things.

Senator Blumenthal. Well, that is one of the facts that an independent or external researcher would verify, whether—

Ms. Stout. Indeed.

Senator BLUMENTHAL.—they are different and how they are different if they are. Mr. Beckerman.

Mr. Beckerman. Yes Senator, we believe that transparency for the algorithm is incredibly important. We were one of the first companies to publish publicly a deep dove in how our algorithm works. We have also open transparency and accountability centers where you invite outside experts and we invite you, Senator, and your staff to come in and see exactly how the algorithm works.

Additionally, it is important to give additional choice to people. And in your feed, for example, on TikTok, if you are not interested, you can indicate that. And we are adding additional tools to give choice and transparency to individuals as they are using TikTok.

Senator Blumenthal. So external access, OK. Ms. Miller.

Ms. MILLER. Senator, we are very transparent as it relates to the way in which our machine learning works. For example, we have a quarterly transparency report that summarizes the videos and channels that we removed based on violating our community guidelines. Earlier this year, we rolled out an additional statistic called the violative view rate—

Senator Blumenthal. Again, I really apologize for interrupting. The question is whether you provide external independent researchers with access to your algorithms and data sets and data privacy protection—you allow external researchers—

Ms. MILLER. We regularly—I am sorry, Senator. Senator BLUMENTHAL. You provide that access?

Ms. MILLER. We regularly partner with experts, for example, in child development, mental health to work with—

Senator Blumenthal. They are experts chosen by you. If somebody independent came to you and wanted that access, yes or no, would you permit it?

Ms. MILLER. Senator, it would depend on the details, but we are always looking to partner with experts in these important fields.

Senator Blumenthal. Well, I am going to cite the difference between your response and Mr. Beckerman's and Ms. Stout's, which indicates certainly a strong hesitancy, if not resistance, to providing access. Let me ask you, Ms. Miller, I think one of the issues here really relates to the claim that these sites are transparent and truthful, which is belied by our actual experience and the fact that they favor regulation.

In the case of Facebook, they have mounted armies of lawyers, paid millions of dollars to fight regulation, whether it is the EARN IT Act and other responsible reforms to Section 230 or privacy legislation or requirements to be more transparent on algorithms. According to the details made public last week, in a multi-state antitrust case, Google has, "sought a coordinated effort to forestall and diminish child privacy protections in proposed regulations by the FTC and legislation."

That filing described attempts to encourage Facebook and Microsoft to fight privacy rules and back down on advocacy for legislation, in particular meeting where that exchange occurred. This disclosure made news, but everybody in D.C. really knew what was true. What was new is that Google's hypocrisy was finally called out. The fact is that Google and YouTube have been fighting against privacy behind the scenes for years. It is hidden in plain sight. It is an open secret.

You have been lobbying the FTC to weaken our existing privacy rule. You spent vast sums of money fighting California's privacy rules. I want to ask you, Ms. Miller, what work has YouTube done to lobby against Congress strengthening online protections for children? And is that report and that claim by the multi-state plaintiffs accurate?

Ms. MILLER. Senator, I understand that the material that you are referencing was regarding our point of view on e-privacy legislation in Europe. Our CEO, Sundar Pichai, has regularly called for

comprehensive privacy legislation in the U.S.

And on behalf of YouTube, I am not aware of any efforts other than to be involved in conversations in a multi-stakeholder way as it relates to any legislation or bills that are being introduced regarding the oversight or regulation of companies such as YouTube.

Senator Blumenthal. So you are saying that these reports about political pressure and lobbying against children's privacy and safe-

guards are just totally false?

Ms. MILLER. I think that we work with lawmakers such as yourself regularly to have conversations to share what we are doing on the platform, the updated protections we are putting in place, but also to hear your concerns and to work with you as you contemplate new regulations.

Senator Blumenthal. Will you commit that you will support pri-

vacy legislation, as has been proposed?

Ms. MILLER. Senator, I am not deeply involved in the details of any specific privacy legislation, but I commit that we will work with you and partner with you on Federal privacy legislation.

Senator Blumenthal. Would you support a ban on targeted ad-

vertising to children and young teens?

Ms. MILLER. Senator, at YouTube, we prohibit personalized advertising in YouTube Kids, as well as in supervised experiences.

Senator Blumenthal. Would you support a ban in law?

Ms. MILLER. We have not waited for laws in order to put those

types of protections in place.

Senator Blumenthal. Well, I hope that you will and that you will be perhaps more forthcoming in the next round of questioning. I will turn to the Ranking Member.

Senator Blackburn. And thank you, Mr. Chairman. Mr. Beckerman, I want to come to you first. In the past, TikTok has said that it has never, nor would it ever share and provide user data to the Chinese Government, even if asked. Yet your privacy policy says you can disclose data collected to respond to Government inquiries.

It also says you share data you collect with your parent companies and affiliates, and that you transmit user information to servers and data centers overseas. And earlier this year, the Chinese Communist Party acquired an ownership stake and a seat on the board of ByteDance. So does TikTok share user data with its parent company, ByteDance?

Mr. BECKERMAN. Thank you, Senator. This is an important question, and I am glad you are asking. TikTok does not-

Senator Blackburn. Quickly. Mr. Beckerman. Excuse me?

Senator Blackburn. Quickly, please.

Mr. Beckerman. Yes, Senator, we do not share information with the Chinese Government, and I would like to point you to a Citizen Lab report, which is one of the most well-respected global National Security experts, where they said our research shows that there is no overt data transmission to the Chinese Government and our testing TikTok did not contact any servers within China.

And then the report goes on to state, Senator, that TikTok does not pose a threat to National Security, and I am happy to submit

that report for the record.

Senator BLACKBURN. Let me ask you—please submit the report for the record. Do any ByteDance employees have access to TikTok user data or any role in creating their algorithm?

Mr. Beckerman. Senator, U.S. user data is stored in the United States, our backups are in Singapore, and we have a world renowned U.S. based security team that handles access to the data.

Senator Blackburn. I understand that you say you store it in Singapore. Tell me about programmers, product developers, and the data teams. Are they housed in China?

Mr. Beckerman. Senator, like many technology companies, we have engineers in the United States and throughout—and around the world.

Senator Blackburn. And so they have access to algorithms and data?

Mr. Beckerman. Senator, we have engineers in the United States, and we also have engineers—

Senator BLACKBURN. That answer is yes. What about Douyin? ByteDance says they are fully separate, but do Douyin employees have any access to TikTok user data or input into the algorithm?

Mr. BECKERMAN. Senator, that is a completely different app from

Senator BLACKBURN. No, it is a related company, you might want to check that. If the Chinese Communist Party ask you for U.S. user data, what is to stop you from providing it since they have a seat on the board of ByteDance and they have a financial stake in the company?

Mr. BECKERMAN. Senator, that is not accurate. One, they do not have a stake in TikTok at all.

Senator Blackburn. Oh, yes they do. It happened in August.

Mr. Beckerman. Senator, that is not accurate.

Senator BLACKBURN. That is ByteDance and let's—we can clarify that for the record. But the record is that the Chinese Communist Party acquired a stake in ByteDance in August, and they now have a seat on the board. So let's talk about TikTok's privacy policy. It says you collect and keep a wide variety of information, including biometric data such as face prints, voice prints, geolocation information, browsing and search history, not just on TikTok, but on other apps, and keystroke patterns and rhythms. Why do you need all of this personal data, especially on our children, which seems to be more than any other platform collects?

Mr. Beckerman. Senator, many outside researchers and experts to look at this have pointed out that TikTok actually collects less data than many of our peers. And on the keystroke issue—

Senator Blackburn. Outside researchers that you are paying for?

Mr. Beckerman. No, Senator.

Senator Blackburn. You would submit that to independent outside researchers? Because what we are seeing with all of this biometric data and the keystroke patterns, that you are exceeding that. So what do you do with this? Are you creating a virtual you of the children that are on your site?

Mr. Beckerman. Senator, I don't know what you mean by virtual you.

Senator Blackburn. Well, a virtual you is you in your presence online. It is like a virtual dossier. I am sure you understand that term. And what do you need with all of this information?

Do you track children's viewing patterns? Are you building a replication of where they go, their search history, their voice, their biometrics? And why does TikTok and ByteDance and Douyin need that information on our children?

Mr. Beckerman. Senator, TikTok is an entertainment platform where people watch and enjoy and create short form videos. It is about uplifting and entertaining content. People love it. And I dis-

agree with the characterization of the way——
Senator Blackburn. That is it from the positive. But there is also a negative, and the negative is that you are building a profile, a virtual you of our children because of the data that you are collecting. You mentioned the family, parent provision that you have. So when you have a parent that goes on that, are they opening their data to TikTok, and is TikTok following them or following and capturing their search history?

See Mr. Beckerman, when you capture all of this data and you hold all of this data, then you are invading the property—the private—the privacy of individuals that are on your site. And that applies to you, to Ms. Stout, to Ms. Miller. Because you are—you say

because you are using the platform, we can do this.

But in essence, what you are doing is making our children and their data-you are making that the product, because you turn around and you sell it and then basically it becomes weaponized against their users. Mr. Chairman, I am over time. I have several questions for Ms. Stout and Ms. Miller. And we will do those in the second round.

Senator Blumenthal. We will have a second round. Senator Klobuchar.

STATEMENT OF HON. AMY KLOBUCHAR, U.S. SENATOR FROM MINNESOTA

Senator Klobuchar. Thank you to both of you. Reports indicate that nearly half of kids 9 to 12 and a third of kids aged 7 to 9 use social media platforms like Facebook, Instagram, Snap, TikTok, YouTube. I don't think parents are going to stand by while our kids and our democracy become collateral damage to a profit game. And I heard last night Mark Zuckerberg's words to his earnings and his

And while he may be out there acting as a victim at his \$29 billion quarter earnings report meeting, the true victims, the true victims, the mom in Duluth who can't get her kid off Facebook to do her homework, the dad mourning losing a child to a Snap speed filter that measured him, echoing the kid at going 123 miles per hour trying to beat the filter, or a child exposed to content glorifying eating disorders on TikTok. So I have had a case right in my state, two cases actually of young people who got drugs through Snap, and I wanted to first start out with that, with you, Ms. Stout.

This is a story—there are two kids, Devin Norring and Ryan McPherson. Devin's story, he was suffering from dental pain at the beginning of the pandemic. He couldn't go in to see a doctor. He had been given a Percocet before, and a classmate said he had a Percocet. Well, what this young man did not know is that this Percocet was laced with fentanyl, and he died just like that. As his mom said in a letter to me, all of the hopes and dreams we as parents had for Devin were erased in the blink of an eye.

A group of parents, including Devin's mother, Bridgett, demanded answers and accountability from Snap on this issue in a letter to you in September. Ms. Stout, I want to know what the answers are. Will you commit to providing more information about the automated tools Snap uses to proactively search for illegal drug

related content as the parents ask?

Ms. Stout. Senator, I very much appreciate you raising this issue because it has been a devastating crisis that has been afflicting our young people. I want to make clear, we are absolutely determined to remove all drug dealers from Snapchat, and we have been very public about our efforts in this space. First of all, we have stepped up our operational efforts, and my heart goes out to

the family of Devin Norring.

I have met with Bridget Norring. I met with her back in April. I heard from her and other families to understand what is happening to them, their experience, and also what is happening on Snapchat. We have stepped up and we have deployed proactive detection measures to get ahead of what the drug dealers are doing. They are constantly evading our tactics, not just on Snapchat, but on every platform.

We have also stepped up our work with law enforcement. Just last week, we had a law enforcement summit where we gathered over 2,000 members of law enforcement across the country so that we can understand what they are dealing with and find out best practices on how we can get them the information they need to

help their investigation.

And finally, Senator, this is so important, but we have deployed in education and awareness campaign because what is happening on our platforms all across social media and technology platforms is that young people who are suffering from mental health and stress, induced by the pandemic and other issues, they are reaching for substances, oftentimes pills and opioids, but these substances are laced with fentanyl, enough fentanyl to kill them-

Senator Klobuchar. But here is my problem, is that if a kid had just walked into, say, a pharmacy, you wouldn't be able to buy that or get that. But in this case, they can get on your platform and just

find a way to buy it. And that is the problem.

And I guess I want to know, are you going to get your drugs— I appreciate everything you said. I appreciate you meeting with the mom. Are you going to get drugs off Snapchat when you have all these kids, half the kids in America read-looking at these platforms?

Ms. Stout. I assure you, this is such a top priority for our entire company. And Senator, it is not just happening on our platform, it is happening on others. So therefore, we need to work collectively with other platforms, the other companies that are here today-

Senator KLOBUCHAR. That is good.

Ms. Stout.—to work together.

Senator Klobuchar. OK, thank you. I think there is other ways to do this too, as creating liability when this happens so maybe that will make you work even faster, so we don't lose another kid. Mr. Beckerman, recent investigation by The Wall Street Journal found that TikTok's algorithm can push young users into content glorifying eating disorders, drug violence. Have you stopped that?

Mr. BECKERMAN. Yes, Senator. I don't agree with the way The Wall Street Journal went about that, but with that said, we have made a number of improvements to the way people can have control over the algorithm and have age appropriate content on

Senator Klobuchar. OK. And what are those changes like? Are they still getting—they are completely protected now from this content?

Mr. Beckerman. Senator, the content related to drugs, as you are as you are pointing out, violates our community guidelines. As it relates to minors safety, over 97 percent of violative content is removed proactively. Of course, we want to get to 100 percent, and it is something that we are constantly working on.

Senator Klobuchar. Did you—are you aware of any research studies your company has conducted about how your apps may push content promoting eating disorders to teens?

Mr. Beckerman. No, Senator.

Senator Klobuchar. OK. Did you ask for any turtle studies on

eating disorders before testifying?

Mr. Beckerman. Not that I am aware of, but we do work with outside experts to understand all of these issues. I think it should be done in a transparent way. As I mentioned earlier, I would love to see the Camera Act passed so we can have additional research in the public domain that all of us can learn from and improve.

Senator Klobuchar. OK, I will save my questions for Ms. Miller

for the next round. Thank you.

Senator Blumenthal. Thanks, Senator Klobuchar. And again, I would remind everyone that you have committed to provide the research that you just referred to in your responses to Senator Klobuchar. All of you have committed to provide that research, and we will look forward to receiving it within days or weeks, not months. And I particularly appreciate Senator Klobuchar's reference to creating liability as a strong incentive, which would involve reform of Section 230. I understand-

Senator Klobuchar. And Mr. Chair, if I could put this letter in from the parents into the record.

Senator Blumenthal. Without objection.

The information referred to follows:

7 Sep 2021 | Amy Neville

A LETTER TO EVAN AT SNAP

Summary: Our open letter to Evan Spiegel of SnapChat

PRESS RELEASE

Aliso Viejo, CA (September 7, 2021)—A group of seven parents whose children died from counterfeit pills sold by drug dealers on Snapchat publicly demanded that

the social media giant measure and report their response to law enforcement and the removal of drug dealers from the platform.

In the letter signed by eight families, parents specifically wanted Snapchat to measure and report to the public its response time to valid law enforcement requests. "Nobody is asking them to fulfill requests that don't go through proper legal channels," said Amy Neville, mother of murdered 14-year-old Alex Neville, "but days are more more deaths if drug dealers who have deadly fake pills aren't identified. can mean more deaths if drug dealers who have deadly fake pills aren't identified when law enforcement requests it. We need to know that they are processing these

with the urgency that lives are at stake."

Amy Neville and other families participated in a meeting where Snapchat stated that they weren't adequately staffed to respond to law enforcement requests quickly. The letter also demands that Snapchat measure their program to find and remove

drug dealers from the platform and refer these individuals to law enforcement proactively. "If Snapchat discovers evidence that someone is dealing drugs on its platform, it must bring law enforcement in." said Jaime Puerta, father of murdered sixteen-year-old Daniel Puerta. "If they just remove their account quietly and they keep dealing and someone dies, Snapchat is morally responsible for that death."

The letter asks that Snapchat convene a nine-member oversight committee of outside experts in law enforcement, public health and safety, and parents whose children have been harmed to review policies, procedures, and enforcement of Snapchat's efforts to clean up its platform.

OUR LETTER TO EVAN SPIEGEL AT SNAP INC

Evan Spiegel, CEO Michael O'Sullivan, General Counsel 2772 Donald Douglas Loop N Santa Monica, CA 90405

September 7, 2021

We, the undersigned, lost our children to opioids sold by dealers on Snapchata platform that caters to users too young to understand the opioid crisis or the risks of counterfeit pills. All social media platforms have a moral responsibility to the young people that use them and we believe they must take that responsibility seri-

ously. We ask that you take the following steps to publicly address the danger of criminal behavior on your platform.

Responsiveness to law enforcement

We write today because some of the investigations into our own children's deaths have encountered resistance to law enforcement requests for information because, as Snapchat representatives told us, they are not adequately resourced to be responsive enough.

Proactive measures to stop drug trafficking

All social media platforms should have proactive programs that include automated software to search for evidence of drug dealing, human review, and referral

We have heard rumors that Snapchat may use such technology, but we seek a formal declaration of its use and commitment to law enforcement referrals. Without the power of law enforcement referrals, criminals can simply continue their activities with new accounts on the service.

Screening of business profiles

Social media companies must carefully scrutinize accounts that advertise and perform other business functions on their platforms to avoid a repeat of the problems Google experienced in 2011. Snapchat should ensure that only NABP-approved pharmacies are permitted to promote pharmaceutical products to U.S. residents. Violators should be referred to the FDA's Office of Criminal Investigation. External transparency committee to evaluate Snapchat's efforts

Snapchat drug dealers are preying on young people across the country, and public sources have already linked these sellers to deaths in fifteen states. Snapchat needs oversight and transparency to reassure parents that it is accountable to protect our children on the platform

children on the platform.

We call on Snapchat to establish a transparency committee of nine individuals, three drawn from Federal and state narcotics law enforcement, three from parents who have lost children to Snapchat drug dealers, and three with an expertise in the area of public health. The committee would receive redacted quarterly reports that show:

• The date Snapchat received each law enforcement request.

- The date Shapchat fulfilled that request. (If multiple fulfilments were required, list the date of each of those and the date of the final fulfillment.)
- The reason any specific request was not fulfilled.
- The number of criminal referrals sent to law enforcement and the agencies the referrals were sent to.
- The number of business accounts terminated or suspended for drug-trafficking criminal behavior.

It is assumed that information about each law enforcement request will be suffi-

ciently redacted to protect the integrity of active investigations.

Our families have suffered a great deal of pain as a result of drug dealers on Snapchat, and our children have died. Snapchat's verbal commitments, genuine good will, and public service messaging efforts are welcome, but the potential for more harm screams for transparency and oversight. We call upon Snapchat to demonstrate that they are doing the work to protect the young users of their platform.

Amy Neville

Mother of Alexander Neville, 14

Murdered by a fentanyl-based fake oxycodone sold by Snapchat drug dealer, 2020

Jaime Puerta

Father of Daniel Joseph Puerta-Johnson, 16

Murdered by counterfeit blue M30 oxy
codone pill sold by Snapchat drug dealer, 2020

Maria Ortega

Mother of Adrian De Jesus, 19

Murdered by a fentanyl-based counterfeit oxycodone sold by Snapchat drug dealer in 2020

Christine Capelouto

Mother of Alexandra Capelouto, 20

Murdered by counterfeit blue M30 oxycodone pill sold by Snapchat drug dealer,

Poisoned and Killed with a fentanyl based counterfeit ecstasy pill sold by a drug dealer on Snapchat, 2020.

VOID IS A NON-PROFIT ORGANIZATION LOCATED IN CALIFORNIA

Senator KLOBUCHAR. Thank you.

Senator Blumenthal. We have been joined by Senator Cantwell remotely.

The ČHAIR. Mr. Chairman, I would defer to my colleagues, Senator Markey and Senator Baldwin.

Senator Blumenthal. Thanks very much. Senator Markey.

STATEMENT OF HON. EDWARD MARKEY, U.S. SENATOR FROM MASSACHUSETTS

Senator Markey. Thank you. Thank you, Mr. Chairman, very much. The problem is clear, big tech preys on children and teens to make more money. Now is the time for the legislative solutions to these problems, and that starts with privacy. I have introduced bipartisan legislation to give children and teens a privacy bill of

rights for the 21st century. Today, a 13 year old girl on these apps

has no privacy rights.

She has no ability to say no, no, you can't gobble up data about me. No, you can't use that data to power algorithms that push toxic content toward me. No, you can't profile me to manipulate me and keep me glued to your apps. No. You have no rights. 13 year old girl in the United States of America in the year 2021.

My bipartisan Children and Teens Online Privacy Protection Act gives 13, 14, and 15 year olds that right to say no. To each witness, do you support my legislation to update the Children's Online Privacy Protection Act to give that 13, 14, and 15 year old control of

their data? Ms. Stout.

Ms. Stout. Senator Markey, I just want to say that we absolutely support a Federal privacy proposal, and we have worked very hard with members of this body to try to-

Senator Markey. Do you support my child protection—my teen

protection law? Do you support it?

Ms. Stout. I think—so, Senator, we agree that there should be additional protections put against young people to protect them further from-

Senator Markey. Right, so you have had a chance to look at the child online privacy protection update that I have introduced. It has been out there for years. Do you support it or not?

Ms. Stout. I think, Senator, we would love to talk to you a bit

more about some of the issues-

Senator Markey. No, I want to talk—this is just what drives us crazy. We want to talk. We want to talk. We want to talk. This bill has been out there for years, and you still don't have a view on it. Do you support it or not?

Ms. Stout. I think there are things that we would like to work

with you on, Senator.

Senator Markey. Listen, this this is just the all game—Mr. Beckerman, do you support the Child Online Privacy Protection Act

being updated the way my legislation does?

Mr. Beckerman. Senator, I want to thank you for your leadership on this issue. It has been very important. Yes, we agree that COPPA needs to be updated, particularly as it relates to the way age verification happens across the internet. It is an area that I think has been not given as much attention as it deserves. We do agree that COPPA does need to be updated.

Senator Markey. Do you support my legislation to update it?

You have had plenty of time to look at it.

Mr. Beckerman. I-we like your approach. However, I think a piece that should be included is a better way to verify age across the internet, across apps, rather than the system that is in place now. And I think with that improvement, it would be something that we would be happy to support. Senator MARKEY. OK. Ms. Miller.

Ms. MILLER. Senator, we also support the goals of updated comprehensive privacy legislation. On your specific bill, I know we have had conversations with your staff in a constructive manner and I would welcome continuing to do that.

Senator Markey. Yes, but it is going to happen soon because this is a crisis that—thank you, Senator Blumenthal. Thank you. Congresswoman Blackburn, this has just surfaced in a way that is clear that we don't have any more time. We have to get this fin-

ished. Your platforms are full of young teens.

Among young teens, 49 percent say they are on TikTok, 52 percent say they are on Snapchat, 81 percent say they are on YouTube. And those users, those 13 year olds, they deserve the right to say, no, you can't track me. You all—you agree with that, Ms. Stout? You can't track me. Do you agree with that?

Ms. Stout. Yes, I agree with that.

Senator Markey. Do you agree with that, Mr. Beckerman?

Mr. BECKERMAN. Yes, Senator.

Senator Markey. Do you agree with that, Ms. Miller?

Ms. MILLER. Yes, Senator, we have tools for all of our users to handle and control and make choices as it relates to the informa-

tion that is gathered.

Senator Markey. The bill also would ban targeted ads to children, apps that should never be allowed to track a 10 year old's browsing history and bombard him with ads based on that data. Ms. Miller, you said that YouTube Kids platform prohibits targeted ads to children. Do you agree that Congress must ban targeted ads to children?

Ms. MILLER. Senator, I defer to you and your peers in terms of what you would want to move forward, but again, we have not waited for laws like this—

Senator MARKEY. No, I am saying to you, would you support to make sure there is a uniform banning of this practice? If you have already adopted it as a company, would you support that being the standard that we have for all platforms across the country?

Ms. MILLER. As you describe it, it is consistent with the approach we have already taken.

Constant MARKEY And wa

Senator Markey. And you would support it, is that what you are saying?

Ms. MILLER. Senator, again, we are already doing this and would

support it consistent——

Senator Markey. No, I am asking you. Would you—no, we are trying to draft the law here. Would you support that provision being in a law, to prohibit it?

Ms. MILLER. Senator, yes, as we already prohibit targeted adver-

Senator Markey. OK, that is all we are trying to do, just get to yes so that we can legislate it—so that we can legislate. Mr. Beckerman, Ms. Stout, same question, should kids—ban targeted ads to kids?

Ms. Stout. Senator, we offer those tools already where kids can opt out and not have targeted ads served to them.

Senator Markey. Would you support that as a national law, that we ban it?

Ms. Stout. Senator, an example of that has been the age appropriate design code, which we adhere to. And I can tell you, Senator, we are looking at exactly that model to apply it elsewhere—

Senator MARKEY. Do you support it as a law that this body passes this year just to prohibit it? If you say it is wrong, should we prohibit it?

Ms. Stout. We offer those, and we agree with the approach,

Senator Markey. So yes, you do support it? Yes or no?

Ms. STOUT. I mean, we agree with your approach. So we are applying it to more

Senator Markey. I appreciate what you are doing. Right, we are now trying to say, if you support it then we just wouldn't want to prohibit anyone else from doing it. Yes?

Ms. Stout. I think we are very close, Senator. Yes.

Senator Markey. Very close. OK, Mr. Beckerman.
Mr. Beckerman. Yes, Senator. And I would also say that we should go beyond that. And part of the approach that we have taken is certain categories of ass shouldn't be shown to teenagers and young adults at all, and I think that should be part of the approach as well.

Senator Markey. OK, so we also need to go beyond privacy and tackle to design features that harm young people, take "like" buttons. As Senator Blumenthal and I have a bill, the Kids Act, which would ban these and other features that quantify popularity.

The research is clear, these features turned apps into virtual popularity contests and are linked to feelings of rejection, low selfworth, and depression. Even YouTube Kids has acknowledged this problem and does not have like buttons. To each witness, should Congress ban features that quantify popularity for kids? Yes or no?

Ms. Stout. Senator, as I mentioned in my opening statement, we don't have those metrics. We have never had a like button or comments because we don't think it should be a popularity contest, but we support that.

Senator Markey. So you would support that? OK. Mr.

Mr. Beckerman. Senator, I think this one is one that we should—it is a little bit more complex. I would be happy to have a conversation, but we have implemented much of the age appropriate design code here in the United States and would encourage similar measures.

Senator Markey. So, you—I don't know that there was any answer in that. Would—you said it is complicated. Do you support banning it or not?

Mr. Beckerman. On banning likes?

Senator Markey. Likes, yes.

Mr. Beckerman. I mean—I think if you want to set it by age that is something that we could look at.

Senator Markey. Ms. Miller.

Ms. MILLER. Senator, as you noted, we already prohibit things on YouTube Kids such as being able to comment, and we would support working with you in regulation in this area.

Senator MARKEY. OK, well, you would support working with us,

but would you support banning likes?

Ms. MILLER. Yes, Senator. Again, we already do not allow for this on the YouTube—YouTube Kids platform.

Senator Markey. And again, the American Academy of Pediatrics just declared a national state of emergency for children and teen mental health. We need to outlaw the online features that exacerbate this crisis. The question that, you know, we have to answer ultimately is, you know, whether or not, for example, we are

going to ban auto play for kids.

With this feature, when one video ends, another quickly begins. Kids stay glued to their phones, so apps collect more data and make more money. Today, 82 percent of parents are worried about their kids screen. Time to each of you today, do you agree that Congress should ban auto play for kids? Yes or no? Ms. Miller, we will start with you this time.

Ms. MILLER. Senator, each of the items that you are outlining, we already prohibit. We do—we have auto default—excuse me, the default set to auto play off on YouTube Kids, as well as for supervised experiences.

Senator Markey. OK, so you would support that being legislated?

Ms. MILLER. Yes. sir.

Senator Markey. OK. Mr. Beckerman.

Mr. Beckerman. First Senator, we have take a break videos and time management tools. But as it relates to auto play, on TikTok, you have to proactively switch to the next video.

Senator Markey. So would you support that legislation passing

then which would ban auto play?

Mr. BECKERMAN. We would be happy to look at it and talk to you about it.

Senator Markey. You don't do it.

Mr. BECKERMAN. Again, I think it is important, as we look at age appropriate features for teens, it is something that we build in TikTok proactively. But again, as we look at legislation, I do think a first step is something about—around age verification across apps.

Senator Markey. Again, this is the historic problem. Yes, Ms.

Stout, would you support it?

Ms. Stout. Senator Markey, I don't believe we have auto play on Snapchat, so I would defer and say that that is something we need to look at more closely. And I am not familiar with that piece of the proposal in your legislation.

Senator Markey. OK, great. We have a lot of work to do. And we have to telescope the timeframe, I think, Mr. Chairman, to get

these people to finally——

Senator Blumenthal. Telescoping the time-frame sounds good. Senator Markey.—finally start acting—thank you, Mr. Chairman.

Senator Blumenthal. Thank you. Thanks, Senator Markey. Thanks for all your good work. Senator Baldwin—or actually, I see Senator Cantwell is here. Oh, sorry, Senator. OK.

STATEMENT OF HON. JOHN THUNE, U.S. SENATOR FROM SOUTH DAKOTA

Senator Thune. Thank you, Mr. Chairman. We all know social media offers a lot of benefits and opportunities, but like has been expressed this morning, I have concerns about the lack of transparency online and limited accountability of big tech companies.

And one of the major problems with social media that has been increasingly concerning is social media platforms' use of algorithms to shape and manipulate user experience resulting in individuals

being trapped in what we call the filter bubble. The filter bubble

can be particularly troubling for younger users.

For example, a recent Wall Street Journal article described in detail how TikTok's algorithm serves up sex and drug videos to minors. I have a bill, the Filter Bubble Transparency Act, and another bill called the Pact Act that would make significant strides

in addressing the lack of transparency online.

And importantly, the Filter Bubble Transparency Act would give consumers the option to engage with Internet platforms without being manipulated by opaque algorithms. So let me just ask you, do you believe consumers should be able to use social media platforms without being manipulated by algorithms designed to keep them engaged on the platform? Mr. Beckerman let's start with you, and then we will go with Ms. Miller and Ms. Stout.

Mr. Beckerman. Yes, Senator, we agree that there needs to be transparency in the way algorithms work and additional choice for individuals as they are using them.

Senator THUNE. Ms. Miller.

Ms. MILLER. Senator, we do provide transparency in the way that our systems and practices work.

Senator THUNE. Ms. Stout.

Ms. Stout. Senator Thune, it is important to understand that what we apply algorithms to is a very small set of content, and we do provide transparency to our users where users get to select interest categories that then determine the kind of content that they are served up. But it is not an unlimited list or set of user generated content. It is quite narrow.

Senator Thune. But I don't know that you or Ms. Miller really answered the question. That is, should consumers who use these social media platforms be able to use them without being manipu-

lated by algorithms?

Ms. ŠTOUT. Senator, yes, I agree with you.

Senator THUNE. Ms. Miller. Ms. MILLER. Yes, Senator.

Senator THUNE. Mr. Beckerman, what is your response to the Wall Street Journal article that described in detail how TikTok's almost the garden and drug videog to minera?

gorithm serves up sex and drug videos to minors?

Mr. Beckerman. Senator, thank you for the question. Sex and drugs are violations of our community guidelines and have no place on TikTok. As it relates to the *Wall Street Journal* article, we disagree with that being an authentic experience that an actual user would have.

Senator Thune. Your platform is perhaps more driven by algorithms in any other social media platform available today, more so even than Facebook. Unlike Facebook, TikTok's algorithms not constrained by a user's social network. On July 29, 2020, TikTok's former CEO Kevin Mayer, wrote, and I quote, "that we believe all companies should disclose their algorithms, moderation policies, and data flows to regulators."

TikTok also states on its website that it makes TikTok source code available for testing and evaluation to guests at its transparency and accountability center. Has TikTok disclosed their algorithms, moderation policies, and data flows to any Federal or State

regulators?

Mr. Beckerman. Senator, yes. I mean, as we pointed out, we do have these transparency centers and we have done I don't think over 100 tours with members of Senator staff and others in the U.S. Government, and we would be happy to continue to be trans-

parent in how that works.

Senator Thune. And I think maybe that Senator Blumenthal maybe touched on this. But in keeping with TikTok's disclosure practices announced in July 2020, would you commit to providing TikTok's algorithms, moderation policies, and data flows to this committee so that we may have independent experts review them?

Mr. Beckerman. Yes, sir. Senator Thune. Thank you. Ms. Miller, does YouTube engage in efforts to change its users' attitudes, behaviors, or influence its

users in any way?

Ms. MILLER. Senator, when users come to YouTube, they come to search and discover all types of content. For example, how to bake bread, to watch a church service, or to do exercise. And as a result, they are introduced to a diversity of content that isn't based on a particular network that they are a part of.

In so doing, there may be additional videos that are recommended to them based on some signals. But those signals will be overrided [sic] if they-to make sure that we are not recom-

mending harmful content.

Senator Thune. Back to Mr. Beckerman. All Chinese Internet companies are compelled by China's national intelligence law to turn over any and all data that the Government demands, and that power is not limited by China's borders. Has TikTok provided data to the Chinese Government on Chinese persons living in the United States or elsewhere outside of China?

Mr. Beckerman. No, Senator. TikTok is also not available in

China. And as I like to point out, that our servers with U.S. data are stored in the United States.

Senator Thune. Does TikTok censor videos of tank man, the famous video of the young man who stood his ground in front of a procession of Chinese army tanks during the 1989 Tiananmen Square crackdown in Beijing?

Mr. Beckerman. No, Senator. You can—you can find that con-

tent on TikTok if you search for it.

Senator Thune. Mr. Chairman, I would suggest that, as has already been pointed out on the Committee, that I think there are a number of things that we need to address. Congress needs to be heard from in this space and particularly with respect to the use of algorithms and the way that users are manipulated, and as you all have already pointed out, particularly young people. So I hope that we can move quickly and directly and in a meaningful way to

address this issue. Thank you.
Senator Blumenthal. Thank you. I think we have strong bipartisan consensus on that issue. Thank you, Senator Thune. Senator

Baldwin.

STATEMENT OF HON. TAMMY BALDWIN, U.S. SENATOR FROM WISCONSIN

Senator Baldwin. Thank you, Chairman Blumenthal. I would like to just note that the series of hearings really began with the revelation that internal research at Facebook revealed the negative impacts on teenagers' body images from using the company's Instagram platform. And we learned, based on research by the Chairman's staff, how quickly somebody on Instagram can go from viewing content on healthy eating to being directed toward postings that focus on unhealthy practices, including glorifying eating disorders.

I know we don't have Facebook and Instagram before us today, but I am particularly concerned about the impact that that type of content can have on young users. I recently joined Senators Klobuchar and Capito, with whom we sponsored the Adam Weston Act legislation to support training and education on eating disorders, on a letter to Facebook and Instagram seeking more details about how they handle this issue.

But I want to ask each of you, can you briefly outline the steps your companies are taking to remove content that promotes unhealthy body image and eating disorders and direct users to supportive resources instead? And in particular, how are you focusing on this issue with regard to your younger users? Why don't we start with Mr. Beckerman and TikTok?

Mr. BECKERMAN. Thank you, Senator. I myself have two young daughters, and this is something that I care a lot about in our teams at TikTok hear a lot about. One, I want to show you we do aggressively remove content like you are describing that would be problematic for eating disorders and problem eating.

Second, we work with outside groups and direct people that are seeking help. And one thing we have heard is that people who are struggling with eating disorders or other weight loss issues come to TikTok to express themselves in a positive way. And so it has been a more of a positive source. And last, we don't allow ads that target people based on weight loss and that kind of content.

Senator Baldwin. Ms. Stout.

Ms. Stout. Thank you, Senator Baldwin. I want to make clear that the content that you describe, content that glorifies eating disorders or self-harm is a complete violation of our community guidelines. Also, as I described earlier, we don't allow unvetted, unmoderated content from being surfaced up to our users.

Discover, which is our media publisher platform, which we partner on with people and publishing companies like *The Wall Street Journal* or NBC News, all of that content is vetted and moderated ahead of time. But specifically——

Senator Baldwin. Can I interrupt and ask, is that done through AI or humans?

Ms. Stout. No. These are handpicked partners that Snapchat has selected to say in this closed garden of content, which is Discover, we will allow certain publishers and media companies to provide news, entertainment content, ESPN or CMT or, you know, The Washington Post, in fact, so users can come look at that content.

It is all pre-moderated and curated, so it is not an unlimited source of user generated content where you could go down a rabbit hole, perhaps, and access that kind of hurtful, damaging content on body image. But I think you raise a very interesting question, what are the products that you are surfacing?

How are we helping users find positive resources? And as a result, we did conduct research about the mental health effects of body image and self-harm, and we created a product called Here for You. This was created in 2020 in the height of the pandemic. When users are in Snapchat and they search anorexia or eating disorder, instead of perhaps being led to content that could be harmful, that content, which is against our guidelines, we now surface expert resources that show content that can help that user, maybe help them, maybe help their friends.

So this is a redirection of that kind of search for potentially hurtful and harmful content that then steers the user to resources that may help them or a member of their, you know, circle of friends.

Senator Baldwin. Ms. Miller.

Ms. MILLER. Senator, we take a comprehensive and really holistic approach on topics like these. We prohibit content that promotes or glorifies things such as eating disorders. It has no place on our platform. But we also realize that users come to share their stories about these experiences or find a community, let alone to find authoritative sources, which is what we raise up on searches like this.

In addition, we also roll out programs and initiatives such as the With Me campaign, whereby we are encouraging users to spend their time, particularly during COVID, in pursuing healthy habits. So we look at this in a very holistic way to make sure that YouTube is a platform where people come and they have a healthy experience, and we again prohibit the type of content that glorifies or promotes these issues, such as eating disorders.

Senator Baldwin. And just if I can follow up the same way I did with Ms. Stout, when you remove content, how are you filtering that out? Are you using artificial intelligence or are you using a team of humans who are—a team of people who are looking at that

content and deciding whether to remove it or not?

Ms. MILLER. It is a mix, Senator. So it is a mix of when we develop content policies, we rely on experts to inform the development of these policies and then we have machine learning to help us capture this type of content at scale. You will see in our quarterly transparency report that more than 90 percent of content that violates our community guidelines are flagged originally by machines. And then there is a mix of human reviewers.

STATEMENT OF HON. MARIA CANTWELL, U.S. SENATOR FROM WASHINGTON

The CHAIR. Thank you. I want to thank the, Senator Blumenthal and Senator Blackburn for holding the Subcommittee hearing, and as witnesses can see, our colleagues are well-informed and very anxious to get legislative fixes to things that they think are crucial to protecting individuals and protecting people's privacy, so I want to thank them for that.

Yesterday, *Motherboard Vice* had an article that—basically the headline was location data from GPS data from apps are given even when people have opted out. So basically, they are—I am going to enter this for the record, unless there is objection, but "the news highlights a stark problem that smartphone users, that they can't actually be sure if some apps are respecting their explicit

preferences around data sharing. The data transfer presents an

issue for the location data companies themselves.

So basically, these companies are reporting information about location, even when people have explicitly opted out. And so they are continuing to collect this information. That is what the reported researchers and *Motherboard* found. So I have a question, do you believe that location data is sensitive data and should be collected only with consumers' consent? All the witnesses, please.

Ms. Stout. Yes, Senator, we agree. Mr. Beckerman. Yes, Senator, agree.

Ms. MILLER. Yes, Senator. And for users, they have access to their account under my activity and my account and can modify their settings, delete their history, and things of that nature. It is all just one click away.

The CHAIR. So any Federal privacy law should make sure that

that is adhered to. I see a nod—is that—

Ms. MILLER. Yes, Senator.

Mr. Beckerman. Yes, Senator.

Ms. Stout. Yes.

The CHAIR. OK, thank you. Do any of you share location data with the company that is in this article? It is Huk—I think H-U-K. They are a major data—

Ms. Stout. Senator, I have never heard of that company. I am

not aware.

The CHAIR. OK.

Mr. BECKERMAN. Senator, I am not aware of the company, but we also don't collect GPS data.

The CHAIR. Well, it would be—you would be affiliated with them in some way. I mean, they are getting this information anyway. So I am sorry, the last witness, if you. Do you know—

Ms. MILLER. Senator, I am also not aware of-

The CHAIR. OK. Maybe you can—maybe you can help us for the record on this so that we know. But this is exactly what the public is frustrated about and concerned about, particularly when harm can be done, that, you know, they go to a website, they say to the website, I don't want my sensitive information to be shared, and then there is this conglomerate of data gathering on top of that, that is not honoring those wishes as it relates to the interface with those apps.

So this is, I think, exactly why we need a strong privacy law and why we should, you know, protect consumers on this. In the Facebook hearing we had, we had this discussion about advertising, and the issue of whether advertisers knew exactly what the

content was that was being advertised.

Now I get that, you know, we are also seeing a migration of major companies like Procter & Gamble and others who are moving off of the Internet because there is the—they are like, I am done with it. I don't want my ad—because it is now run by a system. I don't want my ad just appearing next to certain kinds of content.

And so but what was more startling is that there may be actual deceptive practices here where people are saying, oh, this content, is this when in reality it is something else. In some of these cases we just discussed with Facebook, objectionable hate speech and content that we don't even think should be online.

And yet, that is not what the advertisers knew. So on your websites, do advertisers know what they are—what content they

are being placed next to?

Ms. Stout. So, Senator, I can respond to your question. Yes, our advertisers do know where they are advertising—their advertisements show up. And as I had mentioned in Discover, which is that closed curated garden, those advertisements appear next to publishers and verified users that we have hand-selected to allow to

So on a platform like Snapchat, there is no broadcast disinformation or hate speech, and that is why I think Snapchat is in fact, a very appealing place for advertisers because they know their advertisements will be placed next to safe content.

The CHAIR. Mr. Beckerman.

Mr. Beckerman. Yes, Senators. Advertisers come to TikTok particularly because our content is known for being so authentic and uplifting and fun. And you know, we see ads that are very much like TikTok videos, which are the same themes.

The CHAIR. Ms. Miller.

Ms. MILLER. Senator, we have worked with our advertising partners over the years to make sure that they have trust in the fact that advertising on YouTube is safe for their brands in the same way that we have worked significantly to make sure that users themselves have a safe experience on the platform.

And the advertising associations have recognized the work that we have done in this space so that their brands are safe on the

platform.

The CHAIR. Thank you. I will probably have a follow up on this, but Senator Lee.

STATEMENT OF HON. MIKE LEE, U.S. SENATOR FROM UTAH

Senator Lee. Thank you, Madam Chair. Ms. Miller, I would like to start with you if that is all right. Want to ask you a particular question regarding YouTube's app age rating. And now, Google Play has the app rating set at Teen, meaning 13 and up, while the Apple Store has it rated as 17 and up. Could you tell me why this disparity exists?

That is, if Apple determined that the age rating for YouTube ought to be 17 and up, why did Google determine that its own app

should be rated as Teen, meaning 13 and up?

Ms. MILLER. Senator, I am unfamiliar with the differences that you have just outlined, but I would be happy to follow up with you

and your staff once I get more details on this.

Senator Lee. OK. Yes, I would love to know about that. Just it is a simple question, and I understand it you may not be able to answer it right now, if—as it sounds, you don't have the information. But I would just like to know why that difference exists and whether you agree or disagree with the fact that Google has created its own app as 13 and up while Apple has rated it 17 and up. But I am happy to follow up on that in writing or otherwise.

Ms. Stout, I want to address a similar issue with regard to Snapchat. Now, Snapchat is rated 12 and up on Apple, and it is rated teen on the Google Play Store. Any idea where—why there is that disparity there?

Ms. Stout. Senator, that is a very good question, and I—for some reason, I have heard somewhere the reason why Apple lists at 12 and up, it is an app that is intended for a teen audience.

Senator Lee. Right. Why is there a disparity between the age rating and the content that is available on that platform?

Ms. Stout. Senator, the content that appears on Snapchat is ap-

propriate for an age group of 13 and above.

Senator Lee. Yes, let's talk about that for a minute because I beg to differ. In anticipation of this discussion, of this hearing, I had my staff create a Snapchat account for a 13 year old—for a 15 year old child. Now they didn't select any content preferences for the account. They simply entered a name, a birth year, and an e-mail address.

And then when they opened the Discover page on Snapchat with its default settings, they were immediately bombarded with content that I can most politely describe as wildly inappropriate for a child, including recommendations for, among other things, an invite to play an online sexualized video game that is marketed itself to people who are 18 and up, tips on, "why you shouldn't go to bars alone," notices for video games that are rated for ages 17 and up, and articles about porn stars.

Now, let me remind you that this inappropriate content that has by default been recommended for a 15 year old child is something that was sent to them by an app just using the default settings. So I respectfully, but very strongly beg to differ on your characterization that the content is in fact suitable for children 13 and up, as you say.

Now, according to your own website, Discover is a list of recommended stories. So how and why does Snapchat choose these inappropriate stories to recommend to children? How does that happen? How would that happen?

Ms. Stout. So, Senator, allow me to explain a little bit about Discover. Discover really is a closed content platform. And yes, indeed, we do select, and hand select partners that we work with, and that kind of content is designed to appear on Discover and resonate with an audience that is 13 and above. I am unfamiliar and I have taken notes about what you have said that your account surfaced.

I want to make clear that what—content and community guidelines suggest that any online sexual video game should be age gated to 18 and above. So I am unclear why that content would have shown up in an account that was for a 14 year old. But these community guidelines and publisher guidelines that are on top of those guidelines are intended to be an age appropriate experience for a 13 year old.

Senator Lee. Right. I understand that you have these community guidelines that are there, that they note that advertisers and media partners in Discover agree to additional guidelines. What are these additional guidelines? And I mean, I can guess only that they permit these age inappropriate articles to be shared with children. How would that not be the case?

Ms. Stout. Senator, so these additional guidelines on top of community guidelines are things that suggest they may not glorify violence that any news articles must be accurate, and fact checked. That there is no——

Senator LEE. Well, I am sure the articles about the porn stars were accurate and fact checked, and I am sure that the tips on why you shouldn't go to bars alone are accurate and fact checked. But that is not my question. And this is about whether it is appropriate for children ages 13 and up, as you have certified?

Ms. Stout. Absolutely. And Senator, I think this is an area where we are constantly evolving, and if there are any instances where these publishers are surfacing content to an age cohort that is inappropriate, then they will be removed from our platform.

Senator Lee. OK, so you do review them? What kind of oversight you conduct on this and what——?

Ms. Stout. We use a variety of human review as well as automated review. And so I would very much be interested in talking to you and your staff about what kind of content this was, because if it violates our guidelines, that kind of content would come down.

And just Senator one last thing, while I would agree with you, tastes vary when it comes to the kind of content that is promoted on Discover, there is no content there that is illegal. There is no content there that is hurtful. I mean, it really is intended to be a closed ecosystem where we have better control over the type of content that surfaces.

Senator Lee. Madam Chair, I just have one follow-up question. I just realized. I will be brief——

The CHAIR. Yes, go ahead, Senator Lee. And then our colleague, Senator Luján.

Senator Lee. Thank you. Thank you so much, Madam Chair. So Snapchat has assured its users that it doesn't collect identifying data on them for advertising. How does Snapchat then decide what content is pushed to the top of their Discover page?

Ms. Stout. So, Senator, if you go into your Snapchat account, you have the ability to select preferences, interest categories. And there are several interest categories that a user can select or unselect if they wish. That could be they like, you know, to watch movies, or they enjoy sports, or they are fans of country music.

At any point, it is completely transparent, and a user has the ability to go in and select what they like, and that determines the kind of content that is surfaced to them. If there is any content that they don't like, they can uncheck or check, and that really generates the kind of content that a user in Discover would see.

Senator Lee. My time has expired. Thank you so much, Madam Chair. I really do think we have got to get to the bottom of this—these app ratings here are inappropriate. We all know that there is content on Snapchat and on YouTube, among many other places that is not appropriate for children ages 12 or 13 and up.

The CHAIR. Well, I thank you, Senator Lee, and I would say to my line of questioning, and it is not appropriate to tell advertisers that it is not located next to content and then it is next to content that is inappropriate. Senator Luján.

STATEMENT OF HON. BEN RAY LUJÁN, U.S. SENATOR FROM NEW MEXICO

Senator Luján. Thank you very much, Madam Chair. Ms. Stout, in your testimony, you mentioned that all content on Snapchat, on the Spotlight page is human reviewed before it can be viewed by more than 25 people. Ms. Stout, yes or no, does human review help Snapchat reduce the spread of potentially harmful content?

Ms. Stout. Yes, Senator, we believe it does.

Senator LUJÁN. And I appreciate Snapchat's approach to this problem. More platforms should work to stop harmful content from going viral. However, far too often we find companies say one thing to Congress and then once attention is diverted and the public is distracted, they go around and do the very thing they were warning us against. Can I hold you to that? Will Snapchat continue to keep a human in the loop before content is algorithmically promoted to large audiences?

Ms. Stout. Well, Senator, this is the first time I have testified here before Congress, so please hold me to it. But, at Snapchat, we have taken a very human moderation first approach, not just on spotlight, but across our platforms. So yes, indeed, human moderation will continue to play a huge part of how we moderate content

on our platform and how we keep our users safe. Senator LUJÁN. I am glad to see the importance of platforms taking responsibility before they amplify content and especially publish it to a mass audience, and it is something that many of us share. It is why I introduced the Protecting Americans from Dangerous Algorithms Act as well. Online platforms must be responsible when they are actively promoting hateful and dangerous content.

Ms. Miller, I am grateful that YouTube is making an effort to be more transparent regarding the number of users that view content in violation of your community guidelines. However, I am concerned with one trend. Earlier this year, I wrote a letter to YouTube with 25 of my colleagues on the crisis of non-English misinformation on the platform. We need to make sure all communities, no matter the language they use at home, have the same access to good, reliable information.

Ms. Miller, will YouTube publish its violative view rates broken

down by language?

Ms. MILLER. Senator, thank you for your question, and what you are referring to is this latest data point that we shared earlier this year in which for every 10,000 views on YouTube, 19 to 21 of those views are of content that is violative. And we apply our content policies at a global scale across languages. We do not preference any one language over another. And this includes for the violative view rate.

Senator Luján. And Ms. Miller, I don't believe that's good enough. When we don't break algorithms down by their performances across different groups of people, we end up making existing gaps, existing biases worse. We have seen this with facial recognition technology that unfairly targeted communities of color. And according to reports, we are seeing this happen right now on YouTube. So I will ask again, will YouTube publish its violative view rate broken down by language?

Ms. MILLER. Senator, I would be happy to follow up with you to talk through these details, as I said, for all of our content policies and the enforcement there within and the transparency we provide. It is global in scope, and it is across languages.

Senator Luján. Í definitely look forward to following up and working with you in that space. Mr. Beckerman, before launching TikTok for younger users, did TikTok do any internal research to

understand the impact it would have on young children?

Mr. Beckerman. Thank you, Senator. I am not aware, but for TikTok, for younger users, the content is curated with common sense networks, and it is an age appropriate experience, but I am

not aware of any specific research.

Senator LUJÁN. I would like to follow up on that as well. Products like TikTok can lead to addictive behavior and body image issues in young children, and it is critical that platforms work to understand these problems before they take place. This is a very serious issue, and it is one that is finally getting the attention that it deserves with revelations and whistleblowers that have come forth. I urge you to take this opportunity to begin a transparent public evaluation of the impact your product is having on young children.

And in the end, I just want to follow up on something that many of us have commented on leading up to these important hearings, and I appreciate the Chair's attention to this, the Ranking Member, both of them have authored legislation. Our Chair and Ranking Member of the Subcommittee have also partnered on legislative initiatives. It is critically important that we continue moving forward and that we markup legislation and get something adopted. And I am certainly hopeful that here in the United States, we are paying attention to what is happening in other parts of the world.

Again, Europe is outpacing the United States and being responsible with legislative initiatives surrounding protecting their consumers. There is no reason we can't do that here as well, and I just want to thank Chair Cantwell for the work that she has been doing in this particular space, and I definitely look forward to working with everyone to make sure that we are able to get this done here

in the United States. Thank you so much and I yield back.

The Chair. Senator Luján, so you have reintroduced that bill in the Senate. Is that right? So, OK, thank you. Very much appreciate that and appreciate your leadership. So the witnesses—We are waiting on the return of Senator Blumenthal, so I could go and vote. If he doesn't come in the next minute or so, we will just take a short recess because we are way past time to get over there. But I want to thank all the members who have participated thus far because we have had a very robust discussion today.

You can see that this is a topic that the members of this committee feel very, very passionately about and obviously believe that there is much more that we need to be doing in this particular area. So I appreciate everybody's attendance and focus, and again, want to thank Senator Blumenthal and Senator Blackburn for their leadership in having both of these hearings. And for the larger full committee, we had planned to, you know, move forward on many of these agenda items anyway, but we are very appreciative of the Subcommittee doing some of this work and having members

have a chance to have very detailed interactions on these policies that we need to take action on. So very much appreciate that. So I see Senator Blumenthal has returned. Thank you so much and I will turn it over to you.

Senator Blumenthal. Thank you, Chairman Cantwell, and thanks for your excellent work on this issue. I would like to ask some additional questions on legislative proposals. One of the suggestions that Senator Klobuchar raised was legal responsibility and liability, which, as you know, is now precluded by Section 230.

Let me ask each of you, would you support responsible measures like the EARN IT Act, which I have proposed, to impose some legal responsibility and liability, cutting back on the immunity that Section 230 affords? Ms. Stout.

Ms. Stout. Senator, we agree in Snapchat that there should be an update to the intermediary platform liability laws, CDA230, and in fact, the last time this body addressed a reform, which was for the SESTA/FOSTA, Snapchat was a company that actively participated in that and helped draft legislation. So we would welcome another opportunity, Senator, to work with you on that.

Senator Blumenthal. Thank you. Would you support the EARN IT Act, which, as you know, Senator Graham and I have proposed it imposes liability and affords victims the opportunity to take action against platforms that engage in child pornography and related abuses?

Ms. Stout. Of course, Senator, we completely prohibit that kind of activity, that illegal activity, and we actively look for it. And when we find it, we remove it. If you would allow me to get back to, it has been a while since I have looked at the EARN IT Act. I do recall when you and Senator Graham introduced it. But I believe that the spirit of your legislation is something we would very much support.

Senator Blumenthal. Well, you had the opportunity before to say whether you supported it. So far, you haven't. Will you commit to supporting it?

Ms. Stout. Senator, I again, my memory is failing me a little bit, but I do believe that the provisions in the EARN IT Act were many of the provisions that we supported, so I would be happy to come back with a more specific answer for you.

Senator Blumenthal. Mr. Beckerman.

Mr. Beckerman. Thank you, Senator. We do agree that there needs to be a higher degree of accountability and responsibility for platforms, particularly as it relates to content moderation, that needs to be done in a way that allows all platforms to moderate in an appropriate and aggressive way to make sure that the kinds of content that none of us want to see on the Internet or on any of our platforms is able to be removed.

Senator Blumenthal. Do you support changes in Section 230 to

impose liability?

Mr. BECKERMAN. There absolutely can and should be changes. But again, in a way that would allow companies like ours that are good actors, that are aggressively moderating our platform in a way that we think is responsible, to be able to continue to do so.

Senator Blumenthal. Will you support the EARN IT Act?

Mr. Beckerman. We would be happy—again, we agree with the spirit of it, and we would be happy to work with you and your staff on that bill.

Senator Blumenthal. Well, the bill again was reported unanimously out of the Judiciary committee during the last session. It hasn't changed significantly. Did you support it then?

Mr. Beckerman. I think the concern would be unintended consequences that would lead to hampering a company's ability to remove and police violative content on platforms.

Senator Blumenthal. Is that a yes or a no?

Mr. BECKERMAN. It is a maybe.

Senator Blumenthal. Well, so far we have two maybes. Ms. Miller.

Ms. MILLER. Senator, I am aware of a number of proposals regarding potential updates to 230, and me and my team, as well as the other teams across Google, have been involved in the conversations regarding these various proposals.

I would just like to say, though, that we see 230 as the backbone of the internet, and it is what allows us to moderate content, to make sure that we are taking down content that leads to potentially eating disorders, for example, what we have been talking about here earlier, or self-harm.

So we want to make sure that we continue to have protections in place so we can moderate our platforms so that they are safe and healthy for users. I am aware of the EARN IT Act, and I know again that our staffs have been speaking, but I understand I think there is still ongoing discussions regarding some portions of the proposal.

But we also very much appreciate and understand the rationale as to why this was introduced, particularly around the area of child safety.

Senator Blumenthal. Well, again, is that a yes or no? Do you support it?

Ms. MILLER. We support the goals of the EARN IT Act, but there are some details that I think are still being discussed.

Senator Blumenthal. Well, you know, as Senator Markey has said, this is the talk that we have seen again and again and again and again. We support the goals, but that is meaningless unless you support the legislation. And it took a fight, literally bare knuckle fight to get through legislation that made an exception under SESTA for liability on human trafficking. Just one small piece of reform. And I join in the frustration felt by many of my colleagues that good intentions, support for goals, endorsement of purposes is no substitute for actual endorsement.

I would ask that each and every one of you support the EARN IT Act, but also other specific measures that will provide for legal responsibility. And I think I know what Ms. Miller means by the claim that Section 230 provides a backbone, but it is a backbone without any real spine right now, because all it does is afford virtually limitless immunity to the Internet and to the companies that are here. I am going to interrupt my second round and call on Senator Cruz.

STATEMENT OF HON. TED CRUZ, U.S. SENATOR FROM TEXAS

Senator CRUZ. Thank you, Mr. Chairman. Mr. Beckerman, thank you for being here today. I understand this is the first time that TikTok is testifying before Congress. And I appreciate you making the company available to finally answer some questions. In your testimony, you talked about all the things you say TikTok is doing

to protect kids online. And that is great.

But I want to discuss the broader issue here, which is the control the Chinese Communist Party has over TikTok, its parent company ByteDance, and its sister companies like Beijing ByteDance Technology. Now TikTok has stated repeatedly that it doesn't share the data it collects from Americans with the Chinese Communist Party, and that it wouldn't do so if asked. It has also stated that with regards to data collected on and from Americans that data is stored

in Virginia with a backup in Singapore.

But these denials may in fact be misleading. A quick look at TikTok's privacy policy, in fact, just last night shows there is a lot more than meets the eyes. For example, in the "how we share your information" section, one blurb reads, "we may share all of the information we collect with a parent, subsidiary, or other affiliate of our corporate group." Interestingly, in June of this year, the privacy policy was updated to state that TikTok, "may collect biometric identifiers and biometric information as defined under U.S. laws such as face prints and voice prints."

Mr. Beckerman, does TikTok, consider ByteDance, the parent company of TikTok, which is headquartered in Beijing, to be a part of TikTok's "corporate group" as that term is used in your privacy

policy?

Mr. Beckerman. Thank you, Senator. This is an important question. I would just like to take an opportunity first to clear up misconceptions around some of the accusations that have been leveled against the company. I would like to point to independent research. I understand that trust needs to be earned-

Senator CRUZ. Mr. Beckerman, I get you may have brought a point you want to make. My question is simple and straightforward, does TiKTok consider ByteDance, the parent company headquartered in Beijing, to be part of TikTok's corporate group?

That is a yes or no.

Mr. Beckerman. Senator, access controls for our data is done by our U.S. teams, and as independent researchers, independent experts have pointed out, the data that TikTok has on the app is not of a National Security importance and is of low sensitivity. But again, we do hold that to a high standard, and we have access control-

Senator CRUZ. Mr. Beckerman, we are going to try a third time because the words that came out of your mouth have no relation to the question you were asked. Your privacy policy says you will share information with your corporate group. I am asking a very simple question, is ByteDance, your parent company headquartered in Beijing, part of your corporate group? Yes or no, as you use the term in your privacy policy?

Mr. Beckerman. Senator, I think it is important that I address the broader point in your statement.

Senator CRUZ. So are you willing to answer the question, yes or no? It is a yes or no question. Are they part of your corporate group or not?

Mr. Beckerman. Yes, Senator, it is.

Senator CRUZ. Yes it is. OK. So under your privacy policy, you are explicitly stating that you may be sharing data with them, including biometric identifiers, including face prints, including voice prints. Is that correct?

Mr. Beckerman. No Senator, in the privacy policy it says that, if we are to collect biometric information, which we do not collect biometric data to identify Americans, we would provide consent

and opportunity for consent first.

Senator CRUZ. But you also say we may share all of the information we collect with a parent, subsidiary, or other affiliate of our corporate group, which means with ByteDance headquartered in Beijing, correct?

Mr. Beckerman. Under U.S. access control, sir.

Senator CRUZ. Alright. Second, what about Beijing ByteDance technology, which media reports from earlier this year showed Beijing took a minority stake in through a State backed internet investment Chinese entity, and on the board of which now sits Wu Shuguang, a CCP official who spent most of his career in Chinese propaganda, including with a stint at the Online Opinion Bureau under the Cyberspace Administration of China, China's Internet regulator.

Would you consider Beijing ByteDance technology to be a part of TikTok's corporate group with whom TikTok would share all of the

information it collects?

Mr. Beckerman. Senator, I want to be clear that that entity has no affiliation with TikTok. It is based for domestic licenses of the business in China that is not affiliated or connected to TikTok.

Senator CRUZ. So are you saying no or—yes or no, as to whether Beijing ByteDance technology is part of your corporate group as the privacy policy defines it, it says we may share all of the information we collect with a parent, subsidiary or other affiliate, and presumably that is where it would fall, other affiliate of our corporate group. Is Beijing ByteDance Technology a "other affiliate" of your corporate group?

Mr. Beckerman. Senator, I am saying that entity deals with domestic businesses within China——

Senator CRUZ. You are having a hard time. You are answering questions I am not asking. Again, it is a yes, no, is Beijing ByteDance technology a "other affiliate" of your corporate group as your own privacy policy defines it?

Mr. Beckerman. Senator, I am just trying to be clear to answer your question. That entity is based in China for the Chinese business that is not affiliated or connected with TikTok.

Senator CRUZ. So that is twice you haven't answered. Let's—last time you did it on the third time so let's try it again. Again, it is a yes, no.

Mr. Beckerman. The answer is the same, Senator.

Senator CRUZ. Which is?

Mr. Beckerman. What I just said, that that entity is—

Senator CRUZ. What you just said did not answer the question. Let me just repeat the question again. Is Beijing ByteDance technology a "other affiliate of our corporate group," as your privacy policy defines it, yes or no?

Mr. Beckerman. Senator, as I stated, that entity does not have

any relation to the TikTok entity.

Senator CRUZ. So, I will point out it took three questions to get you to answer about your parent. You finally answered yes that you can share all your information with your parent company based in Beijing. I have asked you three times about this sister

company that is obviously another affiliate.

You have refused three times. That may be revealing. Often, as Sherlock Holmes observed about the dogs that do not bark, it may be revealing that the Chinese propaganda minister that is serving on your sister company and that has been in the business of online propaganda, you are refusing to answer whether they fall under your privacy policy. That reveals, I think, a great deal, unfortunately.

Mr. Beckerman. Senator, with all due respect. I am just trying to be accurate here. There is a lot of accusations that are just not

true, and I want to make sure that it is clear—

Senator CRUZ. OK, I am going to give you one more chance and my time is over, but look, in baseball, three strikes, you are out. Tonight, the Astros are going to begin winning the World Series. Let's see if a fourth strike, you could actually answer the question. And it is a simple yes, no. Is Beijing ByteDance Technology, a "other affiliate of our corporate group," as your privacy policy defines that term?

Mr. Beckerman. Senator, as I pointed out before, my answer is

Senator CRUZ. Yes or no? You didn't answer.

Mr. Beckerman. Senator, I appreciate your trying with gotcha questions. I mean—

Senator CRUZ. It is not a gotcha question. I am asking about your policy—

Mr. Beckerman.—deceitful and inaccurate about—

Senator CRUZ. Are you willing to answer this question, yes or no? Mr. Beckerman. Senator, I answered the question.

Senator CRUZ. You have not answered the question. Is it another affiliate, yes or no?

Mr. Beckerman. Senator, I stated a number of times that that entity is a domestic entity within China for licenses—

Senator CRUZ. And apples are red. You stated something that is not the question I asked. Is it another affiliate as defined under your privacy policy, yes or no?

Mr. Beckerman. Senator, I answered——

Senator CRUZ. You are here under oath. Are you going to answer the question—?

Mr. Beckerman. I answered the question—

Senator CRUZ. Or were you instructed not to answer this question?

Mr. Beckerman. No, Senator, I am just—

Senator CRUZ. So, you are just not refusing to answer it because you don't want to?

Mr. BECKERMAN. Senator, it is not affiliated with TikTok. If that

is your question, that is the answer.

Senator CRUZ. So, your answer. I want to be clear because you are under oath. Your answer is that Beijing ByteDance technology is not a "other affiliate of our corporate group" as your privacy policy uses that term. This is a legal question with consequence.

Mr. Beckerman. Senator, I understand the question. As I pointed out, TikTok is not available in China. That is an entity that is for purposes of a license of a business in China that is not affiliated

with TikTok.

Senator CRUZ. So for the record, you are refusing to answer the question.

Mr. Beckerman. I believe I answered your question, Senator.

Senator CRUZ. Yes or no, tell me which one it is—just give me one word yes or no.

Mr. Beckerman. Senator, I answered—I answered the question. Senator Cruz. You are not willing to say yes or no.

Mr. Beckerman. It was not a yes or no question. I want to be

precise. I want to be——

Senator CRUZ. Is this company another affiliate as defined in your privacy policy? That is binary. There is not a maybe. It is yes or no.

Mr. Beckerman. Senator, the way I answered, I am not aware that, that is the answer to the question.

Senator CRUZ. OK, so you are refusing to answer the question. That does not give this committee any confidence that TikTok is doing anything other than participating in Chinese propaganda and espionage on—

Mr. Beckerman. Senator, that is not accurate. And again, I

would point you to—

Senator CRUZ. If it were if it were not accurate, you would answer the questions. And you have dodged the questions more than any witness I have seen in my 9 years serving in the Senate. That is saying something because witnesses often try to dodge questions. But you answer non-sequiturs and refuse to answer very simple questions. That, in my experience when a witness does that, it is because they are hiding something.

Senator Blumenthal. Senator Moran.

STATEMENT OF HON. JERRY MORAN, U.S. SENATOR FROM KANSAS

Senator MORAN. Mr. Chairman, thank you very much. Let me turn to Ms. Stout and ask a question about data privacy. So, Senator Blumenthal and many others have been working on a con-

sumer data privacy bill now for the last several years.

I have introduced a bill that includes an appropriately scaled right for consumers to correct and erase data that is collected or processed by covered entities, including social media companies. Ms. Stout, I understand that Snap currently allows users the right to correct or delete their user data. Would you please explain Snap's decision to proactively provide this service?

Ms. Stout. Thank you, Senator, for the question. And I just want to say we applaud the Committee and your leadership on this issue, and we fully support a Federal comprehensive privacy bill,

and look forward to continuing to work with you and your staff on that. To address your question, yes, Senator, Snap has been designed with a very privacy centric focus from the very outset.

We don't collect a lot of data. We believe in data minimization, short data retention periods. And to the effect that you just—you made, as you pointed out, we don't store content forever, and we believe in giving users transparency and control, which includes giving them the ability to delete their data if they wish or the ability to download their data. We have a tool within the app. Users are able to download their data, which gives them essentially portability of any kind of information that they may have agreed to share or post or put on their Snapchat account.

Senator MORAN. And other platforms who may not take the same position that Snap has, tell me what it is that you give up in your ability to earn revenue? What is it that you lose by doing that, if

anything?

Ms. Stout. So Senator, we make tradeoffs every day that sometimes disadvantage our bottom line. And there are no rules or regulations that require companies like Snap to have short retention periods. That is why Federal privacy legislation is so critical, or why we choose to voluntarily have a data minimization practice.

So, oftentimes, that means that advertisers find other platforms perhaps more enticing because those platforms keep a history of anything that has ever been searched or ever been shared, or location data that has ever been provided. And that is not the case on Snapchat. So, that is a tradeoff Senator that we make because we believe in being more private—

Senator MORAN. Because if you did it, otherwise, what would you what would you gain by doing so?

Ms. STOUT. We just believe we have a moral responsibility to limit the data that we collect on people.

Senator MORAN. You are answering that fine. But I just I am curious to know, are you giving up—can you generate money? What do you generate by keeping that data than in some other way using

Ms. Stout. Yes, I think we limit ourselves in our ability to optimize for those advertisements and make more money. And we are a company that has not yet turned a profit. We have invested every dollar back into our company and we are here for the long game, and our real ultimate desire is to make a platform that is safe for our community.

Senator MORAN. Thank you. And Mr. Beckerman, what responsibility do platforms have to prevent harmful social media trends from spreading? And how can TikTok improve its algorithm to better comply to TikTok's own terms of service that prohibit, "content that promotes or enables" criminal activity?

Mr. Beckerman. Thank you, Senator. We do have a responsibility to moderate our platform, along with our community guidelines, and do that in a transparent way.

Senator MORAN. Where does that responsibility come from?

Mr. Beckerman. It comes from doing the right thing. You know, for us, we want to be a trusted platform, we want to be a platform where people have a joyful experience and like coming to the app

and that is what we are seeing. And that starts with our commu-

nity guidelines.

Čertain content, like you mentioned illegal activities, misinformation, and other categories that you wouldn't allow on the platform, we work really hard. I think our content moderation teams and our safety teams are often the unsung heroes of the companies that are working every day, 24/7 to ensure that community guidelines are met, and the platform stays positive, joyful.

Senator MORAN. The nature of my second question, the ad-on question was leading because it suggests that you are not complying with your own terms of service that prohibit content that promotes or enables criminal activity. And my question was, how can you improve your algorithm to better accomplish that? Maybe

you want to discount the premise of the question.

Mr. Beckerman. No, Senator, I mean, it is an important area where we always want to get to 100 percent. We released regular transparency reports and 94 percent of our removals of violative content are done proactively. Much of it is done within 24 hours or before there is any views. But we always want to strive to get 100 percent, and that is something that we fight and work on every single day.

Senator MORAN. Thank you. Thank you, Chairman and Ranking Member Blackburn. I think the series of hearings that the Subcommittee is having are hugely important to the nature of our

country and to its future. Thank you.

Senator Blumenthal. Thanks, Senator Moran. Senator Blackburn.

Senator BLACKBURN. Thank you, Mr. Chairman. Ms. Miller, I would like to come to you. You talk about moderation is a combination of machine learning and human review. And it seems that YouTube has no problem pulling down videos that question abortion, global warming, vaccine mandates, but child abuse videos remain on your site. So I am interested to know more about the specific inputs that you use in these reviews. Who established—who establishes these inputs and who oversees them to make sure that you get them right?

Ms. MILLER. Senator, thank you for your question. So we heavily invest in making sure that all of our users, but particularly kids on the platform, have a safe experience. And the way that we do this is in with a number of levers. For example, we have content policies as it relates to child safety on the platform. So not putting

minors into risky situations, in videos on the platform—

Senator BLACKBURN. OK, then let me jump in and ask you then if you are saying you don't want to put children into risky videos. There is a world of self-harm content on your site, and a few searches come up with videos such as, and I am quoting from searches that we have done, songs to slit your wrists by, vertical slit wrist, how to slit your wrist, and painless ways to commit suicide. Now that last video, painless ways, was age gated. And—but do the self-harm and suicide videos violate YouTube's content guidelines, if you are saying you have these guidelines?

Ms. MILLER. Senator, I would certainly welcome following up with you on that video you may be referencing because we abso-

lutely prohibit content regarding suicide.

Senator Blackburn. Ms. Miller, I have to tell you, we have pulled these down in my office. Our team has worked on this because I think it is imperative that we take the steps that are necessary to prevent children and teens from seeing this content. And I just can't imagine that you all are continuing to allow children to figure out how to do this on your site, how to carry out selfharm. So yes, why don't you follow up with me for more detail, and

I would like that response in writing.

And I also talked to a film producer friend this morning, and the film trailer for, "I'm Not Ashamed," which was based on the story of Rachel Scott. She was the first victim of the Columbine attacks, and the film focused on her faith and how it helped in her life. So why would you remove this film trailer and block its distributor from being on your site? And you did this for 11 months? You did not put the trailer back up until a Hollywood Reporter called and said, why have you done this? You got an answer on that one?
Ms. MILLER. Senator, I am sorry, but I am not familiar with that

specific removal.

Senator Blackburn. OK, then let's review this. And we can submit the documentation. I had it sent back over to me. Ms. Stout, I want to come to you. We had an issue in Memphis with a 48 year old man who was on your site. He raped a 16 year old Memphis teen and he claimed to be a music producer. He lured her into this relationship. And one of the news articles recently called Snapchat the app of choice for sexual predators.

This is something that is of tremendous concern and much of it from what I understand, from talking to moms and talking to grand moms, is they use the Snap Map Location service, and I know you are probably going to say only your friends can follow

you, but somehow people are getting around that.

And these sexual predators who are following young people are using this map to get to their location. So we had this in Memphis with the rape. We have another child that was in the middle part of the state, that the predator followed her, and she tried to commit suicide because she knew her family was going to find out. So are you taking steps? Do you want to give me a written answer as to the steps that you all are taking? How are you going to get a handle on this? This is endangering young women.

Ms. Stout. Senator, I am more than happy to give you a detailed written answer, and you have written to us in the past and I appreciate your leadership in following up on this issue. I want to just make crystal clear that the exploitation of minors is absolutely deplorable. It is our highest priority to prevent this type of event from happening on our platform. But with respect to the map, yes, indeed, location—appearing on the map is off by default for every-

one, not only for minors, but for everyone.

So in order to appear to someone on the map and share your location, you must be bi-directional friends with that person. I will say on-with respect to grooming, this is an area where we spend a tremendous amount of time and resources to try to prevent. Snapchat makes it intentionally difficult for strangers to find people that they don't know. We do not have open profiles, we do not have browsable pictures.

We don't have the ability to understand who people's friends are and where they go to school. So Senator, I would be more than happy to follow up with you in writing and provide you more details.

Senator BLACKBURN. Let's do that so we get some more detail. One question for all three of you, and you can answer this in writing if you choose. You have all talked about the research work that you do. Do you get parental consent when you are doing research on children? And can you provide us a copy of the parental consent form? We asked Facebook for this, and they punted the question repeatedly.

And Ms. Miller, I think you need to provide the Committee clarity. You said that you all had never spoken out against online privacy. I think the Chairman and I may question that a little bit. So my question to you—and you can come back to us with a little bit more depth on this. Did you fight it as a part of the Internet Asso-

ciation as they were fighting privacy on your behalf?

And just one thing to wrap, Mr. Chairman, going back to Mr. Beckerman. With the confusion there seems to be around the ownership of TikTok, which their parent company is ByteDance, and the CCP does have a seat on the board, they have a financial stake in ByteDance, their—Douyin is a affiliated entity. And we know there is a relationship with the Chinese Communist Party through all of this. And then I checked, and I know that TikTok user data is stored in the U.S. and Singapore.

And until quite recently, Singapore data services were run by Alibaba, which is another Chinese company. So what we need to have from you, Mr. Beckerman, is some clarity on the chain of ownership, the transmission in the sharing processes that are around U.S. consumer data, especially the data and information of our children. And with that, I will yield back. Thank you, Mr. Chairman.

Senator Blumenthal. Thanks, Senator Blackburn. We are going to go to Senator Sullivan. We are going to finish the first round. Senator Sullivan, Senator Lummis, I am going to go vote. I should be back by the time that Senator Lummis finishes. And in the meantime, Senator Blackburn will preside. Thank you.

STATEMENT OF HON. DAN SULLIVAN, U.S. SENATOR FROM ALASKA

Senator Sullivan. Thank you, Mr. Chairman. And Mr. Beckerman, I know there has been a lot of questions which I certainly have concerns about sharing data with the Chinese Communist Party, given the ownership or at least board influence. Senator Blackburn was just talking about that, I know Senator Cruz raised the issues. I want to raise a related issue. It is what I refer to as kowtow capitalism, kowtow capitalism.

And I think that you guys are Exhibit A of kowtow capitalism. What is kowtow capitalism? It is American executives of American companies censoring Americans' First Amendment rights in America so as not to offend the Chinese Communist Party and, or to gain access to the Chinese market. So we see it on Wall Street. We

see it in the movie studios, we see it with the NBA.

So let me ask a couple of questions related to that. Could a TikTok user—a TikTok user could put up a video that criticizes the Chairman of this committee, the Ranking Member, any Senator, President Biden, former President Trump couldn't he? I mean, not like some horrible, violent suggestion, but just a criticism of an elected official. Is that common?

Mr. Beckerman. Yes. Is it common—actually TikTok really isn't the place for politics? We don't allow political ads. And so political content is not typically what you—

Senator Sullivan. You don't have like funny—

Mr. Beckerman. It wouldn't be a violation. Yes, and wouldn't be a violation of our community guidelines. As long as it is not mis or disinformation or something hateful, then that would be allowed. Senator Sullivan. Good. That is good. That is free speech. I

Senator SULLIVAN. Good. That is good. That is free speech. I would hope you would answer that way. Could a TikTok user put up a video criticizing Xi Jinping. I know he is sensitive, for example, of being compared to Winnie the Pooh. Could a TikTok user put up videos that, kind of, make fun of him maybe with references to Winnie the Pooh? I don't know why he doesn't like Winnie the Pooh, but some reason you can't put Winnie the Pooh up anywhere in China. Can a TikTok user do that?

Mr. Beckerman. Yes, Senator. Senator Sullivan. Really?

Mr. Beckerman. Senator, our community guidelines are done for the United States market by our team in California and our moderators are done here. And that wouldn't be a violation of our community guidelines.

Senator Sullivan. OK, so you—what about—in 2019, you admitted to censoring videos mentioning Tibetan independence. Can a TikTok user mention Tibetan independence?

Mr. BECKERMAN. Yes, Senator.

Senator SULLIVAN. So what happened in 2019 when you guys admitted to censoring a video related to that?

Mr. BECKERMAN. I am not familiar with that incident, but I can assure you that that would not be a violation of our community guidelines and would be allowed on our platform.

Senator SULLIVAN. OK. What about I think there was a TikTok public policy director in 2020 admitted that TikTok had previously censored content that was critical of the CCP in regard to forced labor, with regard to Uyghur Muslims. Is that true?

Mr. Beckerman. That is incorrect. I mean, that would not be a violation of our community guidelines. That content would be permitted.

Senator Sullivan. OK, so you are saying that your videos have never been censored by the Chinese Communist Party on any matter? These are—I am just reading from this, maybe these are all wrong.

Mr. BECKERMAN. No, I can assure you that our content moderation teams are led by Americans. Our moderation guidelines are public and transparent. And content that is critical of any Government, frankly, as long as it meets our community guidelines, not mis or disinformation or hateful speech or something like that would be allowed. And I would encourage you to search for a num-

ber of these examples that you mentioned today on TikTok, and I am sure you could find them all.

Senator Sullivan. So Tibetan independence and the Uyghur Muslim forced labor issues were not censored? I have wrong information——

Mr. Beckerman. They are not currently censored.

Senator SULLIVAN. Were they previously censored by anyone at TikTok? I thought—I am reading here, 2019, 2020, you admitted, somebody in TikTok admitted doing that. So that didn't happen?

Mr. BECKERMAN. I am not aware of that. I can say that is not a violation of our guidelines now, and that is not how we moderate content.

Senator Sullivan. OK. Well, listen, Madam Chair, or Mr. Chairman and the Ranking Member, I do think this issue of kowtow capitalism where American companies are censoring Americans, we are seeing it all the time, is an issue that this committee should be looking at because the Chinese Communist Party, of course, can crush freedom of speech in their own country, but they shouldn't be able to crush it in this country.

And Mr. Beckerman, I am glad that you are denying any of this. I look forward to seeing videos somewhere, somehow on TikTok that are critical of the Chinese Communist Party. Not really hold my breath, but maybe, it is true. Maybe ByteDance and the CCP board members are fine with videos criticizing President Xi Jinping and other members of the Communist Party.

So you are saying that is totally fine and completely acceptable

policy for TikTok users?

Mr. Beckerman. Yes, Senator. And just to be perfectly clear, there is not involvement from the Chinese Communist Party in moderation of TikTok, and it is all done by Americans from within the United States.

Senator Sullivan. Right. Thank you.

Mr. BECKERMAN. Thank you.

Senator BLACKBURN. Thank you, Mr. Sullivan. And I can—I will let you—we are going to continue looking at these issues of the Chinese Communist Party's influence into U.S. companies and into technology, and the silencing and censoring of free speech of U.S. citizens online.

Senator Sullivan. Right. It is a really important issue, I appreciate that. Thank you.

Senator BLACKBURN. So thank you for that line of questioning. Yes, it is. Senator Lummis, you are recognized.

STATEMENT OF HON. CYNTHIA LUMMIS, U.S. SENATOR FROM WYOMING

Senator Lummis. Thank you, Madam Chairman, and I am going to start directly with questions. And if I have any time left, I would like to read a statement into the record. But I will start with a question for Ms. Miller. YouTube has implemented several features, such as auto play, that have been proven to make the platform difficult to stop using.

What mechanisms has YouTube employed to ensure that children specifically have tools to counteract these design decisions? And do you believe those controls are sufficient?

Ms. MILLER. Senator, thank you for your question. Auto play is default off on YouTube Kids, as well as in supervised experiences on YouTube Main. So we have set those to default off. We do allow, if the default is changed to allow for auto play, for example, if a family is in a car and they would like to have the—the parents have decided they want auto play to continue, but we have set it to default off.

Senator Lummis. And do you believe that sufficient?

Ms. MILLER. I think it is one of a number of tools that are important to make sure that kids have a healthy and safe experience on the platform. Another is that we do not deliver targeted advertising on YouTube Kids. Another is that we age gate content to make sure that minors do not see age inappropriate material.

So it is only with a number of tools and protocols in place do we think that we are meeting the bar we have set for ourselves, that parents expect of us, experts in the field such as child development advise us on to make sure, again, that kids are having a safe expe-

rience on the platform.

Senator Lummis. Thank you. Mr. Beckerman, after my staff reviewed your privacy policy, I want to list some of the items that TikTok will automatically collect from one of its users: that person's location, the device model of your phone, their browsing history outside and inside of TikTok, content of all messages sent on TikTok, their IP address, their biometric identifying information, and information from their phones, such as keystroke patterns in other apps.

Do you believe this sort of mass data collection is necessary to

deliver a high quality experience to your users?

Mr. BECKERMAN. Senator, I thank you for that question. Some of those items that you listed off are things that we are not currently collecting, and we State that in the privacy policy, that if we were to, we would notify users and get their consent.

Senator Lummis. And which of those that I may—named are—

have that condition?

Mr. Beckerman. Yes. As it relates to biometric, I don't—I didn't write down every single thing. I would be happy to go through with

you and your team on that.

Senator Lummis. Perfect. We will follow up with you. My question is, regardless of which ones require consent of those I mentioned, why should any member of this committee feel comfortable with the vast amounts of data your company is collecting on our children, especially since TikTok has a relationship to the Chinese Communist Party?

Mr. Beckerman. Senator, first off as it relates to data, TikTok actually collects less in many categories than many of our peers, and some of these things, as you mentioned, keystroke that is not collecting actually what people are typing. That is actually an antifraud, anti-spam measure that measures the cadence of typing because a bot, for example, would behave very differently than a human. And so it is not actually collecting what people are typing. It is an anti-fraud measure.

Senator LUMMIS. Which of your competitors or other companies that you are aware of collect more information?

Mr. Beckerman. I probably would point to Facebook and

Instagram, for example.

Senator Lummis. Well, I will ask the same questions of them. Thank you. This is for all our witnesses. Are your platforms specifically designed to keep users engaged as long as possible? You want to start, Mr. Beckerman?

Mr. Beckerman. Senator, we want to make sure that people are having an entertaining experience. You know, like TV or movies, you know, TikTok is meant to be entertaining. But we do think we have a responsibility along with parents to make sure that it is being used in a responsible way. We have to take a break videos. We have time management tools. And family pairing is another tool where parents can help limit the time that their teenagers are spending on the app.

Senator LUMMIS. But is the length of engagement a metric that

your company uses in order to define success?

Mr. Beckerman. There is multiple definitions of success, Senator, it is not just based on how much time somebody's spending on the app.

Senator Lummis. But is that one of them? Is length of engage-

ment one of the metrics?

Mr. Beckerman. I think overall engagement is more important than the amount of time that is being spent.

Senator LUMMIS. But is it one of the metrics?

Mr. Beckerman. It is a metric that I think many platforms check on, on how much time people are spending on the app.

Senator Lummis. Thank you. Ms. Stout, same question. Are your

platforms designed to keep users engaged as long as possible?

Ms. Stout. So, Senator, when you open up Snapchat, you don't open up Snapchat to a feed of other people's content designed to keep you consuming more and more content. You open up Snapchat to a blank camera, which is a blank canvas. It is a place where users come to talk to their friends in videos and in pictures.

Senator Lummis. So but is it a metric that the company incor-

porates into your definitions of success?

Ms. Stout. I believe we see success as if the platform is facilitating real live conversations and connections with friends. Snapchat is a place where friends come to talk to each other.

Senator Lummis. But is it a metric? My question is, do you measure success in any way, shape, or form by how long people stay on your site? Is that one of multiple driving measures of success?

Ms. Stout. I think the way I can answer that question is, it is one of many metrics.

Senator Lummis. OK, thanks. Ms. Miller, same question. Are your platforms designed to keep users engaged as long as possible?

Ms. MILLER. Senator, our platforms are designed to allow users to search and discover all types of content. It is intended for them to have an enjoyable experience.

Senator LUMMIS. I get it, but I am asking, is this one of the metrics by which you define success?

Ms. MILLER. Senator, we have a number of digital wellbeing tools

Senator LUMMIS. But is this one of the metrics? Is it—is it one of them? I mean, thereMs. MILLER. It is.

Senator LUMMIS. There could their numerous metrics but is this one of them?

Ms. MILLER. Yes. To the specific question that you are asking, we do look at, for example, if a video was watched through its entirety. That helps us determine whether or not that was a quality video relative to the search that the user had. So we do look at those types of data points to inform us as it relates to the experience that the user has had on the platform.

Senator Lummis. Thank you. Madam Chairman, do I have time to enter an opening statement? Thank you, Madam Chairman. This generation of children will grow up under a level of surveillance

well beyond any previous one.

And although the recent Wall Street Journal reports focused on the problematic harms of Facebook, we know that the problem is endemic among our youth and bigger than Facebook alone. Children are impressionable. They are easily manipulated by targeting advertising to them, and they are readily influenced by the highly sophisticated algorithms that often surge—serve age inappropriate content to its youth users.

These invisible algorithms continuously nudge our children in different directions, which can impact their development without their knowledge and without their parents' knowledge. These algorithms on these platforms were designed with adults in mind, not children. Only a tiny fraction of children understand the harm that can come from sharing sensitive information, pictures, or opinions that become part of their digital permanent record.

But what is most alarming is that none of them can fully understand how the content fed to them by algorithms will shape their worldview during these formative years. So more must be done to promote responsible social media use. We must educate parents on how to teach their children to avoid the pitfalls of using these platforms.

And more importantly, we must hold these platforms accountable for the effects that their design decisions have on our children. Mr. Chairman, thank you for the opportunity to add that opening statement to the record and thank you for your indulgence. I yield back.

Senator Markey. Thank you and thank you for your leadership on these issues and your very insightful questions. We do have to protect kids in our country. You just put your finger on it. So let me ask this. Just going—following up on Senator Lummis and Senator Blumenthal, everyone on the panel here today.

These kids are constantly posting content and their data is being tracked, stored, and monetized. But we know that young users lack the cognitive ability to grasp that their posts are going to live online forever. To each of our witnesses, do you agree that Congress should give children and teens, but more importantly, their parents, their ability, the right to erase their online data? Mr. Beckerman.

Mr. Beckerman. Yes, Senator. Senator Markey. Ms. Stout.

Ms. Stout. Yes, we do, Senator, but I would say that content on Snapchat does not appear permanently.

Senator Markey. And again, I appreciate that. And to you, Ms. Miller.

Ms. MILLER. Yes, Senator. And users have the ability to delete their information as well as having auto delete tools.

Senator Markey. So if they should have the right to delete it. Do agree with that, Ms. Miller?

Ms. MILLER. Yes, Senator.

Senator Markey. OK, great. Today, apps collect troves of information about kids that have nothing to do with the apps service. For example, one gaming app that allows children to race cartoon cars with animal drivers has reportedly amassed huge amounts of kids data unrelated to the app's game, including location and browsing history. Why do apps gobble up as much information as they can about kids?

Well, it is to make money. Congress, in my opinion, has to step in and prevent this harmful collection of data. Ms. Miller, do you agree that platforms should stop data collection that has nothing

to do with fulfilling the app's service?

Ms. MILLER. Senator, we do limit the data that we collect, and this is particularly true, for example, on the YouTube Kids app. We limit the data collection to only rely on what is necessary to make sure that the platform runs.

Senator Markey. So do you agree that that should become a law

that all platforms have to do the same thing?

Ms. MILLER. Senator, I don't want to speak to whether or not it should become a law and, or the details of any proposed legislation, but at YouTube, we have not waited for a law to make sure that we have these protections.

Senator Markey. I appreciate that. It is just it is time to just make up your mind, you know, yes or no on legislation. We need

to move. Mr. Beckerman.

Mr. Beckerman. Yes, Senator, we do need legislation. I think we are overdue on very strong national privacy laws.

Senator Markey. Great. Ms. Stout.

Ms. Stout. Yes, Senator, we absolutely collect less data, and it sounds as though collection of data that is irrelevant to the per-

formance of the app does not appear to be within scope.

Senator Markey. Today, popular influencers peddle products on-line while they flaunt their lavish lifestyles to young users. Influencer marketing like videos of online child celebrities opening new toys, getting millions of views but they are inherently manipulative to young kids, who often cannot tell that they are really paid advertisements that their heroes are pushing—that the hero is getting a monetary kickback from.

My bill with Senator Blumenthal, the Kids Act, would ban this type of promotion of influencer marketing to kids. To each of the witnesses, do you agree that Congress should pass legislation to stop apps from pushing influencer marketing to children in our country? Yes or no? Ms. Miller.

Ms. MILLER. Senator, again, we have actually moved in this direction whereby we have a set of quality principles regarding the type of content that is made available on the YouTube Kids app, and in so doing, we make sure that we are not providing content that, for example, would have a significant prevalence of that type of material. And we also limit the types of ads that can be delivered on the app. I would—I apologize, I don't have the details—

Senator Markey. Should we make it—should we make it illegal so that people out there who might be trying to influence children know that there is an enforceable penalty that—

Ms. MILLER. I absolutely think it is worth a discussion. I would

need to stare at the details of such a bill.

Senator Markey. Again, it has been around for a long time. Mr. Beckerman.

Mr. Beckerman. Yes, Senator, we already limit the kinds of advertisements that can be served to teens, but we do agree that there should be additional transparency and additional privacy laws passed.

Senator Markey. Ms. Stout.

Ms. Stout. Senator, I would agree that I think for young people, there should be additional protections placed. So yes, we would be

happy to look at that.

Senator Markey. And by the way, we banned it on television because we know that we can't have the heroes just holding the product on Saturday morning and just saying, hey, kids, tell your parents to buy this right now. We banned it there. We have to ban it online. So thank you. And finally, push alerts.

Studies show that 70 percent of teenagers report checking social media multiple times a day. Excessive use of social media has been linked to depression, anxiety, and feelings of isolation. The last thing an app should be doing is using methods like push notifications, automated messages that nudge users to open an app to make young users spend even more time online.

To each of the witnesses, do you agree that Congress should pass, again, the law that Senator Blumenthal and I are trying to move, which would ban push alerts for children? Ms. Miller.

Ms. MILLER. I agree that additional protections should be in place regarding things such as push alerts for children.

Senator Markey. OK, thank you. Mr. Beckerman.

Mr. Beckerman. Senator, we already limit push notifications.

Senator Markey. Should we—should we ban push notifications? Mr. Beckerman. I think that would be appropriate, but already we have already done that proactively for some push notifications. Senator Markey. OK. Ms. Stout.

Ms. Stout. Yes, Senator. Snapchat does not utilize push notifications or nudges as the UK age appropriate design code pointed out, but we would very much be in agreement with your legislation.

Senator Markey. Thank you. Thank you, Mr. Chairman.

Senator Blumenthal. Thanks, Senator Markey. I understand Senator Klobuchar has a few more questions, and while we are waiting for her, I have a few too. So appreciate your patience. Let me begin by acknowledging, and I think you would acknowledge as well, the reason that you made many of the changes that you have is the UK's child safety law, the age appropriate design code. I think we need an American version of the British child safety law. And I want to ask about some of its provisions.

Will you commit to supporting a child safety law that obligates companies to act in the best interests of children? It establishes in effect a duty of care that could be legally enforceable. Ms. Stout. Ms. Stout. Senator, we were very privileged to be able to work with the Information Commissioner's Office in the UK in their design of the age appropriate design code. We, of course, comply with the code as it has come into force this year. And, as I mentioned to Senator Markey, we are looking actively at that code to see how we could apply it outside of just the UK market and apply it to many of our other markets.

So with respect to a child safety law that obligates companies to think about the protection in the safety of children that is something that Snap has already done without regulation. But, of

course, we would be happy to work with the Committee.

Senator Blumenthal. But the point is, and we would love to be in a world where we could rely on voluntary action by platforms like yourselves, but in effect, you have sacrificed that claim to be voluntary action or reliance on your voluntary action. Whether it is Facebook or your companies in various ways, I think you have shown that we can't trust big tech to police itself.

And so when you say we already do it, well, you may decide to do it, but there is no legal obligation that you do it and there is no way to hold you accountable under current law. That is what we need to do. That is why I am asking you about a law. I am hoping that your answer is a yes, that you would support it. As a duty of care, it is a matter of law. You are nodding, and I hope that is

a yes.

Ms. Stout. Yes, Senator, and that was very much a part of my testimony in my opening statement, which because the time it takes regulation to be actually implemented, we don't believe that we should have to wait for that regulation. We are going to take the voluntary steps to best protect-

Senator Blumenthal. Would you support it?

Ms. Stout. Yes, Senator.

Senator Blumenthal. Thank you. Mr. Beckerman.

Mr. Beckerman. Yes, Senator. We have already voluntarily implemented much of the age appropriate design code here in the United States. But I do agree with you that companies need to do more, and I was struck by your comments in your opening statement about a race to the top.

And that is very much the approach that we are trying to take at TikTok to do more, go above and beyond, and really be a place where it is seen that we are putting wellness of teens, and safety of teens in particular, ahead of other motives.

Senator Blumenthal. So let me see if I can answer the question as I would if I were in your shoes. Yes, we strongly and enthusiastically support that kind of child safety law. We are already

doing more than we would need to do under the law.

Mr. Beckerman. Yes, Senator. And additionally, I do think as it relates to age verification, it is something that should be included and in measures like that and included in updates to COPPA, which are long overdue.

Senator Blumenthal. Ms. Miller.

Ms. MILLER. Senator, I actually respectfully disagree that we only wait until we have legal obligations to put systems, practices, and protocols in place. For example, we rolled out YouTube Kids in 2015 to make sure that as kids were trying to be on the main platform, that we created a space that was particularly for them and their safety. We have rolled out a number of——

Senator Blumenthal. I am going to interrupt you, Ms. Miller, because I think you misinterpret me. I am not suggesting that you wait. On the contrary, I am suggesting that you do it now. I think Mr. Beckerman and Ms. Stout perfectly well understood my question. Both of them would support that law. Would you, yes or no?

Ms. MILLER. I would support looking at any details as it relates to additional legal protections for kids in the U.S. As you may know, the age appropriate design code went into effect in the UK just over a month ago, so it is still early days, but we had already rolled out a number of the protections required in the UK, we rolled them out globally.

Senator Blumenthal. Is that a yes or a no?

Ms. MILLER. Yes, I would be happy to work with you and your staff on a U.S. version.

Senator Blumenthal. Would you support this legislation—would you support a version of the UK child safety law?

Ms. MILLER. I would need to stare at the details of any specific bill, but I certainly support expansions of child safety protections.

Senator Blumenthal. I am going to yield to Senator Klobuchar, and she is now ready to ask her question.

Senator KLOBUCHAR. Thank you. Thank you very much. Thank you for—a lot going on here today. Thank you for taking me remotely for the second round. So one of the things that I have tried to do in all of these hearings that we have had, including in the Judiciary Antitrust subcommittee that I chair, is taking the veil off this idea that this is just web, everyone has fun—that's what it is, and it is just a cool thing.

Some of that is true, but it is also a huge profit making venture. And when you look at it that way as the most successful and biggest companies the world has ever known in the big tech platforms in terms of money, then you have to start looking at it, wait a minute, why haven't we done anything about privacy law? Or why haven't we done anything on Senator Markey's children's law?

Why haven't we put in place some rules about transparency and algorithms, or mostly, from my perspective, done anything about competition policy, which is a market approach to get alternatives. So I just start with this question, which I have asked many of the platforms. The larger platforms.

Ms. Stout, Snap reported that its advertising revenue per user in North America for the second quarter of 2021 was \$7.37. How much of Snap's revenue came from users under the age of 18?

Ms. Stout. Senator, I don't have that information for you, but I would be happy to take that back.

Senator KLOBUCHAR. OK, good. I appreciate that. I have been trying to get that from Facebook, of course. Just to give you a sense of Facebook's revenue per user from their own documents is \$51 per user in—for the U.S. per quarter. Just to put it in some perspective. Mr. Beckerman, TikTok is a privately held company, so we don't have public documents on your advertising revenue per user. What is your best estimate of advertising revenue per U.S. user for the last quarter?

Mr. BECKERMAN. Senator, I don't have those numbers, but I would be happy to go back and check in with the team.

Senator Klobuchar. Do you think you can provide us that?

Mr. BECKERMAN. Again, we are not a public company, but I will

go back and see what we can find for you.

Senator KLOBUCHAR. OK, and again, I am trying to figure out the percentage from users under the age of 18, for us to get some perspective on how much of this is your—how much of the business and the future growth of the business is in kids. Ms. Miller, YouTube reported that its advertising revenue overall in the second quarter of 2021 was \$7 billion. How much of YouTube's revenue came from users under the age of 18?

Ms. MILLER. Senator, I am—I don't know the answer to that, and I am not sure if we look at data internally that way, so I would also be happy to follow up with you. But I would like to note that as a company, we have long shared our revenue with our creators. And so over the last 3 years alone, we have paid out more than \$30 billion to our creators.

Senator Klobuchar. OK. I work with the Antitrust subcommittee. Takes me in a related path, and I recently introduced the bipartisan legislation, the American Innovation and Choice Online Act, with Senator Grassley and there is several people, including Senator Blumenthal, who are co-sponsors of that legislation.

And it is focused on a gnarly problem, which is that you have platforms that are self-preferencing their own stuff at the top. They are taking, in some cases, data that they uniquely have on other products and then making knockoff products and then underpricing the competitors. Ms. Miller, Roku says YouTube has made unfair demands in negotiations for carrying the YouTube TV app on Roku, including demanding Roku give preference to YouTube over other content providers in its search results, which is exactly what this legislation gets to, and give YouTube access to nonpublic data from Roku's users.

Did YouTube make these demands for nonpublic data and preferencing in search results in negotiations with Roku?

Ms. MILLER. Senator, I am not involved in the negotiations with Roku. I know we have been having discussions with them for several months and we are trying to come to a resolution that is good for users as well as both companies, but I am not involved in the negotiations.

Senator Klobuchar. OK. I will put this on the record for others in the company because I also I would like to know more generally if YouTube has ever demanded nonpublic data or preferencing in search results in negotiations with other providers. It just gives you a sense of the dominant platform by far in the area of search, being able to use that power over people who are simply trying to be on that platform.

So I think that gets really to the core of what we are trying to do. I also just had a follow up on your YouTube banning all vaccine misinformation, which I commended you for at the time. How much content have you removed related to this policy change since you banned all anti-vaccine misinformation? And have you seen a change in the viewership rate?

Ms. MILLER. Senator, I feel bad—I think this is the question I would absolutely love to answer with more detail, but I know that we have removed so much video as it relates to COVID stuff.

Senator KLOBUCHAR. We will put it in writing, and we will get the answer that way. Thank you. My last question, Ms. Stout, Mr. Beckerman, I just mentioned this bill that Senator Grassley and I have introduced with 10 other co-sponsors aimed at ensuring that dominant digital platforms don't use their market power to thwart competition.

Do you support some of the competition reforms in the bill and have you faced any challenges when it comes to competing with the

largest digital platforms? That will be my last question.

Ms. Stout. Senator, we have—we are aware of the bill that you introduced with Senator Grassley, and as a non-dominant platform, very much appreciate your legislation and the work that you are doing in this space. And yes, as a smaller platform, it is an incredibly competitive arena for us. We compete every day with companies that collect more information on users and store that information to monetize.

So any efforts that this body, and especially the legislation that you have undertaken to create an equal playing field so that it is indeed a competitive atmosphere for platforms like Snapchat, we would very much welcome.

Senator Klobuchar. OK, thanks. Mr. Beckerman.

Mr. Beckerman. Yes, likewise, we appreciate your efforts in the work that you have done to promote and spur competition. It is something that I think we all benefit from. As it relates to specific challenges that we face, I would be happy to meet with you and your team to discuss in detail some of those issues.

Senator Klobuchar. Thank you very much. Thank you, every-

body.

Ms. MILLER. Senator, I found the answer if you don't mind. So on COVID misinfo, we have removed over a million videos since we started rolling out COVID misinfo, and over 130,000 videos as it relates to COVID vaccine misinfo. So it is an area we have put a lot of resources behind to make sure our platform isn't promoting or allowing this type of content. Thank you.

Senator KLOBUCHAR. OK, thank you. Thanks, everybody.

Thanks, Senator Blumenthal and Blackburn.

Senator Blumenthal. Thank you, Senator Klobuchar. I seem to be the last person standing or sitting between you and the end, but I do have some questions. Ms. Stout and Mr. Beckerman, over 10 million teens use your apps. These are extremely impressionable young people, and they are a highly lucrative market. And you make tens, probably hundreds of millions from them.

There is a term, I am sure you have heard it, called "Snapchat dysmorphia," to describe the depression, mental health, and other issues associated with your apps. Snapchat dysmorphia. Kids use the filters that are offered and create destructive, harmful expectations, the filter does, and you study the impact of these filters on teen mental health, I assume. Do you study the impact of these filters before you put them in front of kids? Ms. Stout.

Ms. Stout. Yes, Senator, the technology that you are referring to is what we call lenses, and these lenses are augmented reality filters that we allow users who choose to use them to apply them over top of selfies. And for those that are familiar, they are the, you know, opportunity to put on a dog face or—

Senator Blumenthal. I have seen them. But they also change one's appearance, potentially to make one thinner, different colors,

different skin tones.

Ms. Stout. So these filters, Senator, are created both by Snapchat and our creator community. There are over 5 million of these augmented reality filters, and a very, very small percentage of those filters are what you would call beautification filters. Most of them are silly, fun, entertaining filters that people use to lower the barrier of conversation.

Because again, when you are using Snapchat, you are not posting anything permanently for likes or comments. You are using those filters in a private way to exchange a text or to exchange a video message with a friend. So it really kind of creates this fun, authentic ability to communicate with your friends in a fun way. And those filters are one of the many ways in which friends love to communicate with each other.

Senator Blumenthal. Do you study the impact on kids before

you offer them? Have you studied them?

Ms. Stout. So we do a considerable amount of research on our products. And in fact, one of—I think it was one of the competitive pieces of research that was revealed as part of your earlier hearing showed that filters or lenses on Snapchat are intended to be fun

and silly. It is not about body dysmorphia—

Senator Blumenthal. Well, we all know as parents, something intended to be fun and silly can easily become something that is dangerous and depressing. And that is the simple fact about these filters. Not all of them. Maybe not the majority of them, but some of them. And I would like you to provide the research that you have done. I have asked for other research, but I am gathering from what you have said that you haven't—you don't do the research before you provide them.

Ms. Stout. No, Senator, that's not what I am saying. And in fact, I—particularly with respect to this question, I am not able to answer the kind of research we have done simply because I am not aware, but I will go back and look and try to get you an answer

to answer your question.

Senator Blumenthal. You know, for 8 years, Snapchat had a speed filter. It allowed users to add their speed to videos, as you know. The result was that it encouraged teens to race their cars at reckless speeds. There were several fatal and catastrophic crashes associated with teens using the speed filter. It took, I think, 8 years, and warnings from safety advocates, and multiple deaths for Snapchat to finally remove that dangerous speed filter. It was silly. It was maybe fun for some people.

It was catastrophic for others. And I want to raise what happened to Carson Bride. His mother, Kristin, originally from Darien, told me about how Carson was relentlessly bullied through anonymous apps on Snapchat. After trying desperately to stop the abuse and after unanswered pleas for help, he took his own life. Silly, fun—how can parents protect kids from the relentless bullying that

follows kids home from school?

As Ms. Haugen said so movingly, it no longer stops at the school-house door. Now 24/7. Comes into their homes, just before they go

to sleep. What are you doing to stop bullying on Snapchat?

Ms. Stout. Senator, this is an incredibly moving issue for me as a parent as well. Bullying is unfortunately something we are seeing more and more happening to our kids. And indeed, this is not just on the online community. They face it at school, they bring it at home. We have zero tolerance on Snapchat for bullying or harassment of any kind. And as a platform that reaches so many young people, we see this as a responsibility to get in front of this issue and do everything we can to stop it.

So again, because Snapchat is designed differently, you don't have multiple abuse vectors for bullying in a public sort of way on Snapchat. You don't have public permanent posts where people can like or comment, thereby introducing additional opportunities for public bullying or public shaming. That is not to say that bullying doesn't happen both online and offline. And so we have in-app reporting tools where users can anonymously and quickly report bul-

lying or any other harmful activity.

And I will say our trust and safety teams that work around the clock actually move to remove this content on average in less than 2 hours. Usually, it is far more quickly than that. But I want to assure you, Senator—and thank you for raising the bullying issue.

In addition to prevention, we do—I am sorry.

In addition to combating this practice, we do a lot to prevent it, and we think that there ought to be more opportunities to raise awareness on the effects of bullying and the effects that people's words have on other people, and we will continue to make that commitment.

Senator Blumenthal. Mr. Beckerman, we have heard from TikTok that it is a safe environment. At the same time, we see challenges—the blackout challenge, just to take one example, where in effect teens and children have actually died emulating and recording themselves following blackout and choking challenges, including a 9-year old in Tennessee who saw one on TikTok.

Despite apparent efforts to discourage certain dangerous trends, this content is still being posted, and viewed widely by kids online and followed and emulated whether it is destruction of school property or other kinds of challenges. A mother who lost her child in the choking challenge shared questions with me, and they are questions that deserve answers from you and from others who are here today.

And I am just going to ask her question, how can parents be confident that TikTok, Snapchat, and YouTube will not continue to host and push dangerous and deadly challenges to our kids?

Mr. Beckerman. Thank you, Senator. As it relates to this specific challenge and particularly things that can be dangerous or deadly for teens, it is sad and tragic. I mean, I remember myself when I was in grade school, I had a classmate that we lost from something very similar.

And so I know it is something that touches many of our, many of our lives and it is awful. As it relates to TikTok, this is not content that we have been able to find on our platform. It is not content that we would allow on our platform. Independent fact check-

ers have looked. But it is important that we all remain vigilant to ensure that things that are dangerous or even deadly, particularly

for teenagers, don't find their way on platforms.

And it is important that we all have conversations with our teenagers to make sure they stay safe offline and make sure they stay safe online. And it is a responsibility that we take. And again, I just think it is important that we distinguish between things that there is actual content on platforms encouraging things, among others were actually the content does not exist on the platform.

Senator Blumenthal. But this content existed on your platform. Mr. Beckerman. Senator, we have not been able to find any evidence of a blackout challenge on TikTok at all. And again, it would violate our guidelines, but it is something that we proactively search, both with AI and human moderators. But we have found absolutely no evidence of it. And it is something that we have had conversations with parents and others all the time around, things that could be dangerous, but it is important that that we have conversations with our teens about this.

Senator Blumenthal. And other challenges? You are saying none of them—

Mr. Beckerman. So anything that is illegal or dangerous violates our guidelines. Our teams have been very aggressive and acted very quickly as things pop up on the platform, as our transparency reports show. Over 94 percent of content that violates our guidelines are removed automatically, but dangerous challenges have no place on TikTok.

Senator Blumenthal. I understand that you react by taking them down, but they existed for the time they were there. And I guess my question is, what can you do to prevent those challenges

from being there in the first place?

Mr. Beckerman. Well, we are we are often able actually to be proactive in blocking things from coming on when they are found. We divert searches, we block content, we remove content. But unfortunately, something that we have seen recently are press reports about alleged challenges that when fact checkers like Snopes and other independent organizations look into it, they find out that these never existed on TikTok in the first place, and in fact, were hoaxes that originated on other platforms.

And so I think it is important of all of us, particularly parents and teachers and those that care about our young people, that we, you know, look at the facts and look to see what content actually exists, rather than spreading rumors about alleged challenges.

Senator Blumenthal. Well, I just have to tell you, Mr. Beckerman, we found pass out videos. We found them. So I have a lot of trouble crediting your response on that score. Let me ask you about another instance. A parent in Connecticut wrote to me about how their 13 year old daughter was inundated on TikTok with videos about suicide, self-injury, and eating disorders. I have heard similar stories from parents across the country. So, we checked. We did our own research.

My staff made a TikTok account I was describing earlier and spent hours scrolling through its endless feed of videos as a teen would. TikTok began by showing us videos of dance trends. Within a week, TikTok started pushing videos promoting suicidal ideation

and self-harm. We didn't seek out this content. We can't show these videos in this room because they were so disturbing and explicit.

And finally, another TikTok account we created as a 13 year old, as a 13 year old was flooded with nothing but sexually obscene videos. How do you explain to parents why TikTok is inundating their kids with these kinds of videos of suicide, self-injury, and eating disorders? This is stuff occurring in the real world.

Mr. Beckerman. Yes, Senator. I can't speak to what the examples were that—from your staff, but I can assure you that is not the normal experience that teens or people that use TiKTok would get. Those kinds of content violate our guidelines and are removed. But we would be happy to sit down with you and your staff and go through what that example was.

Senator Blumenthal. Would you support restrictions on product features that are intended to foster addictive use of apps? In other

words, bar features that lead to addictive use of apps.

Mr. Beckerman. Yes, Senator, we have already done a number of that proactively in the form of take a break of videos, in terms of time management features, in terms of not having direct messages, for example for under 16, and our family pairing tools. You know, it is important that when we look at these issues, that we have conversations and foster these conversations with our teenagers.

I mean, that is one of the reasons we built our family pairing to make it easy for parents. I know it can be daunting for parents when you have teenagers to have all these different tools and features to protect them. But we built this in a way where parents from their own app can have additional control of the safety, pri-

vacy, and time use for their teenagers.

Senator Blumenthal. I have to go vote, and I don't have anyone to preside here for me. May I suggest taking a 5-minute recess? I will have some final questions if you would be willing to wait, and then we can close the hearing. Thank you.

[Recess.]

Senator Blumenthal. Welcome back, everyone. I was told that a couple of my colleagues wanted to come back and have an opportunity to question, but if they are not here within the next 5 minutes, they will lose that opportunity. Thank you for your patience. I want to give you an opportunity to answer what I think is probably one of the paramount questions on the minds of most parents today.

And that is, how are you different from Facebook? I mentioned at the very start of the hearing that you would try to differentiate yourself from Facebook. It is not enough to say, we are different. But I want to give you the opportunity to tell parents why they should be less fearful and scared of Snapchat, TikTok, and YouTube. Ms. Stout.

Ms. Stout. Senator, thank you for the opportunity. Again, I think it is very important to understand Snapchat is a very different platform. It was created by our founders to be an antidote to social media. Our founders saw very early on what traditional social media can do to your self-esteem, to your feeling that you have to perform or be perfect for the world at all times.

And Snapchat was a decidedly different platform that was private, that was safe, where people could come and actually talk to the friends that they have in real life. You weren't being judged on your perfect posts. Your posts were intended to be ephemeral, the way a real life conversation is ephemeral. And it really strengthens relationships. So for parents who may not be sure of Snapchat, I would tell them, get on Snapchat, understand what your kids are doing. And in fact, we are going to make it easier for parents through parental controls to understand how indeed their kids can be safe and private on Snapchat.

These parental controls, which will be rolling out very soon, will help parents understand who their kids are talking to the most, what their children's privacy or location settings may be, and start a conversation with their parents because this is a partnership. Parents and children ought to come together and talk to about

how-----

Senator Blumenthal. Let me just interrupt—let me interrupt by saying, you know, everything you have said is fine, but it is aspirational, or it will appear so to some parents. In other words, just like Facebook says, well we bring communities together. Nothing to see here that is bad. I understand your goals, and for a lot of people, it may be so, but I am giving you the opportunity to tell us how you protect kids in a way that Facebook doesn't.

Ms. Stout. Yes, so it is not only aspirational, but it is something that we live, and we practice every day. So in order to be friends with people on Snapchat, you have to be bi-directional friends. So there is no following. There is no not being invited into the con-

versations.

These are two-way mutual friendships where people are able to speak to one another. Senator, an average 14 year old on Snapchat only has 30 friends and we don't try to push them to create more friends or make more connections with strangers. We want Snapchatters to be connected to the people they are connected to in real life.

Senator Blumenthal. Mr. Beckerman.

Mr. Beckerman. Thank you, Senator. So let me answer that in three ways. First, we put people first and particularly as it relates to teens, we put their well-being first. As I outlined, and with just so many examples of things that we have done, we have made difficult policy and difficult product choices that put the well-being of teens first. And so that is everything from we don't allow direct messages for under 16. Under 16, their accounts are private. The way we have built out family controls.

And so with our actions—look, trust, everybody can say trust us, but unless you are doing actions and putting those actions in place as we already have and we are constantly improving, we are not talking today about things that aspirationally we want to do, we are talking about things that we already have done and are continuing to build on. So that is one. Two, the approach of the company. Being open and humble is really part of our company culture, and that means that we are open to getting feedback from outside experts and policymakers and parents about ways we can improve.

And we are humble to say, we are not always going to get it right, and we want to take that feedback and implement it in a

way that really, really can earn trust, particularly as it relates to protecting teenagers. And the third is, I would encourage parents to have conversations with your teenagers. You know, ask them how they use TikTok, how do they feel after using TikTok? And you know, from what we are hearing and what we are seeing in the community is that TikTok is a joyful experience. It is inclusive. It makes teens feel better when you have difficult times when the pandemic or in the school day.

And so just have those conversations with your teens, but also take the opportunity to maybe film a video, a TikTok video with your teenager to facilitate that conversation and recognize that TikTok is not a passive experience. You know, it is not just about watching videos, it is about the creativity and making and doing fun videos on the app. And that is something that we have seen parents come together with their teenagers on that. And so I think those three would answer your question, Senator.

Senator Blumenthal. Ms. Miller.

[Technical problems.]

Ms. MILLER.—prioritize profits over safety. Senator Blumenthal. I think we are—maybe you can start again. I think we missed the beginning of what you said.

Ms. MILLER. Oh, can you hear me now?

Senator Blumenthal. Yes.

Ms. MILLER. OK. Sorry, Senator. Thank you for asking this question. For YouTube, our mission is to give everyone a voice and show them the world. And as such, when users come to YouTube, they are—they experience search and discovery of finding all types of content. But as a company, we do not prioritize profits over safety. We invest heavily in making sure that our platforms are safe for our users, and we do not wait to act.

We put systems and practices and protocols in place that over time we have relied on when we need to adapt to the world around us. For example, we rolled out YouTube Kids in 2015 when we realized that those under 13 were trying to get on the YouTube Main platform. We created a safe space for them on YouTube Kids. In addition, we are a transparent company. We rolled out our first quarterly transparency report in 2018. We continue to update that on a quarterly basis where we share additional metrics.

We rolled out the violative view rate statistic earlier this year. We believe that being a company that, where responsibility is our number one priority, where we are constantly trying to balance the freedom of expression with being responsible, is something that is ingrained in our DNA, and we are very proud of the work that we

have done but we know there is always more for us to do.

Senator Blumenthal. I am going to leave it to the parents of America and the world whether or not they find your answers sufficient to distinguish you from Facebook. I know for sure with certainty that we need more than just, with all due respect, the kind of answers that you have given to persuade me that we can rely on voluntary action by any of the companies in big tech. And so I think you are going to hear a continuing drumbeat.

And I hope that you will be part of the effort for reform. I hope there will be release and disclosure. I want to read in that connection a text that just came to my staff, and I haven't had the opportunity really to review it myself, but I am going to read it. It comes from one of the families whose story I shared anonymously, "I have watched the entire hearing. I just heard the Senator refer to our experience. Mr. Beckerman is lying that her experience is atypical, that is not true.

My daughter's TikTok feed was inundated with suicide ideation videos, self-harm videos, and anorexia videos because she was feeling depressed and searched for videos on this topic. Then every time she opened the app, there was more. She could have been feeling better, but these videos brought her down again and inspired her to spend hours making her own similar videos. I also just wanted you to know that she is an honor student, athlete, president of her student council and all around great kid.

Mr. Beckerman's testimony makes me so angry." I say that with all due respect, but I just want folks watching to know that we are not taking at face value what you have told us, and I certainly want to give you an opportunity to respond but you and big tech should know, these messages are the real life experiences that people are relating to us as we go to town meetings, as we talk to

them on the phone or by e-mail.

That is what we are hearing. That is why you are here. And I think there are a lot of questions still to be answered here and a lot of contentions to be disputed and a lot of work to be done in real action, real reform, and I hope Congress will do it. So I would give every one of you an opportunity to make a closing statement, if you wish or not, and then we will conclude the hearing. Ms. Stout.

Ms. Stout. Chairman Blumenthal, thank you again for the opportunity to appear today, and I would absolutely agree with you that voluntary measures are not adequate in and of themselves, and we have never suggested that voluntary regulation is the way forward. We want to partner with this committee and with Congress on what those regulations should look like.

And we, as I wrote in my testimony, believe that Congress's role in pushing forward regulation in this space is absolutely necessary. So thank you for the opportunity to talk to you today about how Snapchat has been prioritizing and will continue to prioritize the safety and well-being of young people on our platform. We do see this as our highest priority order, and we will continue to press forward. Thank you.

Senator Blumenthal. Mr. Beckerman.

Mr. Beckerman. Thank you, Senator. This is one of the most important topics for all of us, particularly as parents, as tech companies, and as Congress to address. We all have a responsibility to protect our teenagers. None of us can do it alone. It can't just be on the parents. It can't just be on us. And it certainly can't just be on Congress. But we have to come together and solve the issues that exist both on and offline for our teenagers.

It is a responsibility that we at TikTok take very seriously and have taken tangible actions and steps to do, and will continue to do so. And you know, as we focus today on legislation, we support stronger privacy rules to be put in place. We have done many of that proactively on our own. We support Congress acting on age appropriate design, age appropriate content, the things that we

have done proactively. We would like to see Congress act on that as well. Thank you.

Senator Blumenthal. Thank you. Ms. Miller.

Ms. MILLER. Senator, thank you very much for inviting me to participate in today's hearing. I will just close by saying what I said at the top in my opening statement, which is that there is no more important issue than the safety of kids online, and I am personally committed, our executives are committed to working with you and other stakeholders to make sure that the experience that kids have online is one that is healthy and enjoyable.

kids have online is one that is healthy and enjoyable.

I very much appreciate the concerns that you and your colleagues have shared with us. We will continue to work to improve and earn the trust of parents and kids and all the other stakeholders working together in this important space. Thank you very

much.

Senator Blumenthal. Well, I thank each of you for being here today. I hope you have grasped the sense of urgency and impatience that many of us feel. The time for platitudes and bromides is over. We have seen the lobbyists at work, we have seen millions of dollars arrayed against us. And I think we are determined this time to overcome them.

And I hope that we will look back on this hearing as a turning point along with others that we are going to continue to hold in this subcommittee. So I thank you for being here today, and this hearing is adjourned.

[Whereupon, at 1:37 p.m., the hearing was adjourned.]

APPENDIX

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO JENNIFER STOUT

Preventing Child Sexual Exploitation and Grooming. According to the National Center for Missing and Exploited Children (NCMEC), 2020 was record-breaking for reports of child sexual exploitation, and this year has already exceeded that number of reports. In November 2019, I led a bipartisan letter to Snap and other tech companies about what you are doing to stop child sexual exploitation.

Question 1. What technologies do you have in place to automatically monitor for the grooming and enticement of children and report these crimes swiftly? If none,

please explain why not.

Answer. Snapchat is designed in a way that makes it difficult for strangers to connect with people they do not know. Snapchatters cannot see each other's friend lists, and, by default, you cannot receive a message from someone who isn't already your friend. These features incorporate user safety right at the start. We also offer easyto-use in-app reporting tools so users can flag concerning activity and our team can review reports quickly. We prioritize reports related to child safety and act on these as quickly as possible. In addition, we also use PhotoDNA and CSAI Match technology to proactively identify and report known child sexual abuse imagery on Snapchat. When we identify instances of child sexual abuse material (CSAM) on Snapchat, we preserve these and report them to the National Center for Missing & Exploited Children (NCMEC), who reviews and coordinates with law enforcement.

Question 2. What technologies do you have in place to detect and stop predators from inducing children to send explicit images, videos, or live-streams of them-

selves? If none, please explain why not.

Answer. As referenced in Question 1, we utilize PhotoDNA and CSAI Match to proactively identify and report CSAM to law enforcement authorities. Snapchat does not offer a live-stream function. We are actively exploring technologies to detect novel child sexual abuse imagery on Snapchat. We work with a range of expert safety organizations and leaders to inform our approach to safety and make sure Snapchat is a safe environment for our users. Since 2019, we've created and maintained a Parents' Guide to Snapchat, offering parents and caregivers a step-by-step resource to understanding and navigating the platform. We also offer tools to assist with Snapchatters in crisis, and we offer specific resources on topics like non-consensual intimate imagery (NCII), and Reporting on Snapchat.

Question 3. What technologies do you have in place to detect Child Sexual Abuse Material (CSAM) videos, both for known CSAM (such as the NCMEC hashlist) and new CSAM videos? If none, please explain why not.

Answer. On the detection side, we use CSAI Match to detect known CSAM videos through video-hashing. This technology relies on organizations like NCMEC's hash database to prevent revictimization of survivors. On the prevention side, we have resources and information within the app to educate our community on the risks of sending intimate imagery. As referenced in Question 2, we are actively exploring technologies to detect novel child sexual abuse imagery on Snapchat. technologies to detect novel child sexual abuse imagery on Snapchat.

Question 4. Do you have specific mechanisms for users to report child sexual ex-

Question 4. Do you have specific mechanisms for users to report child sexual exploitation? If so, please elaborate on them; if not, please explain why not.

Answer. We have an in-app reporting feature that allows for users to report any offending content, including reports of child sexual exploitation. We prioritize reports related to child safety and act on these reports on average within two hours. Our Trust & Safety team works 24/7 to review reports and if they find the content violates our Community Guidelines for CSAM, the violating material is removed, the account is suspended and preserved, and the account and relevant material are sent to NCMEC for further investigation and law enforcement referral.

Question 5. Do you include IP addresses in all reports to NCMEC? If not, please explain why not.

Answer. Yes. The Cybertip reports that Snap sends to NCMEC include the IP data that corresponds to the account's last successful login, whenever that data is available.

When law enforcement submits appropriate follow-up legal process to Snap in the course of investigating a Cybertip, Snap provides all available IP data for the requested account for the specified time period.

Question 6. Please provide your policies and protocols on how you respond to law enforcement when they reach out for information relating to child sexual exploitation reports.

Answer. There are two common circumstances in which law enforcement contacts Snap for information relating to Cybertip reports submitted to NCMEC. First, to investigate the Cybertip report, law enforcement may serve Snap with authorized legal process, such as a search warrant or subpoena, for the account specified in the report. In these instances, Snap complies with valid legal processes and provides law enforcement all available responsive data.

Second, law enforcement may submit questions to our Law Enforcement Operations team with regard to either the information contained within the Cybertip report or the data received pursuant to a subsequently served search warrant or subpoena. Although not legally mandated to respond in these instances, Snap's policy is to respond to all inquiries and endeavor to answer the questions posed based on available information, while complying with any applicable legal restrictions on voluntary disclosure.

Snapstreaks and Stopping Addictive Use. Snapstreaks are one of the most popular features on Snapchat. Teens have spoken about how Snapstreaks are seen as proof of friendships, and they will go as far as waking up early, staying up late, or logging in to friends' accounts so they can keep up their streaks. It would appear that the purpose of this feature is to encourage teens to open Snapchat every day and send photos or videos—or else they risk their friendship.

Question 1. Has Snap studied the impact Snapstreaks have on the mental health of children? And has Snap studied whether product features like Snapstreaks encourage problematic (or addictive) usage? If so, please elaborate on these studies and share them with the Subcommittee; if not, please explain why not.

Answer. No, Snap has not studied the impact Snapstreaks have on the mental health of children nor have we conducted research specifically measuring the addictiveness of our features. In an effort to understand how our community engaged with Streaks and to prevent them from becoming more outsized in importance than we intended, we conducted research in 2018 with Snapchatters (ages 13–24) to better understand how they used Streaks, and how we could address any concerns to improve their experiences.

Our findings showed that our user community generally finds Streaks to be a fun and an easy way to stay in touch with close friends. Streaks is a feature that was introduced early on to celebrate friendships and that represents how often people in a relationship send snaps to each other. Streaks are voluntary, not public, and are only visible between the two friends who have a streak. Streaks also do not represent time spent on the app. An emoji reflects the number of days you've been in contact with a friend through the exchange of Snaps. There is no nudge encouraging a user to jump back into the app, and we do not utilize push notifications.

a user to jump back into the app and we do not utilize push notifications.

We are sharing those research findings (see Document 1—Streaks Topline August 2018). And according to the research, two-thirds of our community said they don't feel it is very important to keep Streaks going. Further, the majority of our community did not indicate Streaks were a significant source of stress—but six percent did. Even though our user research indicated streaks were not a major source of stress for our community, we still took action to reduce any possible anxiety they could cause. We did this in three ways: 1) By deemphasizing the prominence of the Streaks emoji; 2) By lengthening the expiration window for a Streak from 6 hours to 12 hours, which resulted in a 50 percent reduction in user requests to restore Streaks; and 3) Allowing people an automated and speedy way to restore their own Snapstreaks online, which further reduced pressure. We will continue to explore ways to ensure Streaks serve the best interest of our community and remain fun, and lighthearted ways to connect with your friends. In the near term, we are planning to roll out new features that will allow users to have more control over Streaks and to pause them if they need a break.

Question 2. Snapstreaks create conditions where kids as young as 13 are obsessively opening Snapchat as a proof of their friendship. Why has Snap decided to keep this feature for young teens, despite its steps to reduce addiction elsewhere? Answer. See answer to Question 1.

Question 3. To test this feature, my staff created an account for a thirteen-yearold. We added the real account of a staff member of my office as a friend. We found that Snapchat started suggesting the account for the thirteen-year-old to the adult friends of our staff member. Why did it provide that recommendation?

Answer. We have designed Quick Add with a focus on safety and privacy, and as part of that we have engineered the feature to focus on helping people find their real-life friends. It does so by focusing on existing connections among friends. If the account created for a hypothetical thirteen year-old user granted Snapchat permission to access their device's contacts, then these contacts found in that user's phone may have been the reason for the friend suggestion.

Quick Add also contains other privacy-centric features. For example, we give users the ability to turn Quick Add off so that users who do not want to appear as friend suggestions to other users have the ability to control how they appear.

Finally, we are intensely focused on continuing to make Quick Add even safer and more privacy-centric, especially for Snapchatters ages 13–17. As part of that ongoing effort, we are currently rolling out a change for minors: To be discoverable in QuickAdd by someone else, they will need to have a certain number of friends in common with that person. That will further ensure that the person is their real-life friend.

Response to Written Questions Submitted by Hon. Amy Klobuchar to Jennifer Stout

Social Media and Mental Health. According to press reports, Snap conducted user research on how often its users "experience feelings of stress, depression, and anxiety." ¹

Question 1. Please provide a copy of those research studies.

Answer. We have conducted research to better understand how Snapchatters feel about our app, and their overall relationship to mental health—which we did to understand what resources we could build to better support them.

According to research we conducted in 2019, 95 percent of Snapchatters said the app makes them feel happy, more than any other service tested. This research was released publicly.

Additional research we conducted in 2019 showed that spending time with friends, whether in person or online, is the best defense against feeling lonely or depressed and that friends are often a first port of call for those struggling with a mental health challenge. We used the findings of this research to develop an in-app portal called *Here For You*, which surfaces resources from expert organizations to Snapchatters when they search for a range of mental health-related topics. We shared the findings of our research publicly at the time that we rolled out this feature. We are attaching it for you.

 $^{^{1}} https://www.fastcompany.com/90461846/snapchat-introduces-new-interventions-for-mental-health$

August 2018

Streaks User Research

Survey n=790 and in-person interviews n=8 Snapchat users age 13 - 24 | Phoenix, AZ

Topline

User research demonstrates that users main motivation to continue Streaks is to see how high they can get their Streak User research demonstrates that users main motivation to continue streaks is to see how high they can get trief streak member; however, on a spectrum from fun to stressful, users feel that Streaks are a fun way to stay in-touch with people. They use Streaks as a light form of communication fulfilling their need to stay connected with others and are often used to "break-the-ice" in social groups. Although Streaks are viewed as an easy and quick form of communication, users place a high value on them. There seems to be a correlation between importance and the Streak number, the higher the number the more important that Streak is. However, users do not gauge the value of their personal relationships with the Streak number and it was observed that some users maintained Streaks with friends they did not know well. When compared to Instagram likes, users feel like Streaks are equally important, but feel that getting Instagram Likes are 2x more stressful than Streaks, 12% compared to 6% 'intolerable' to 'large' amount of stress respectively.

Select excerpts from in-person research

think it's fun to see how long we can do it."

"I like the notification, like I like having that pop up on my phone. When I go to sleep and wake up and say "aw people love me, even though it is just streaks, these people love me."

"I like seeing how high I can get my streaks because it is really cool. If you can keep it high then why not. I want to hit 300 really bad but I haven't yet. I'm 60 days away. And when I hit 300 I'm going to want to hit 500."

"I have streaks with a lot of random people. Some school people but some people from Quick add or they added me. And we send Streaks back and forth and sometimes chat too."

"Sometimes someone has tried sending me one and I didn't do it. A few of them were girls that liked me but I didn't like them back and I didnt want to be mean so I just didn't start one with them.

"If I don't know them that well I will send them a photo asking if they want to start a Streak. If they don't send one back I won't send them one anymore. It's a little awkward."

Which of the following best represents why do you do Streaks?

- To see how high we can get the number: 55%
- To stay connected with people that I might not otherwise: 33%

To gauge how strong my relationships are with people: 13%

How important is it to keep your streaks going?

- Extremely (13%) + Very (21%): 34% Slightly (21%) + Moderately (33%): 55%

Not at all: 11%

Stress Level for Streaks

- Intolerable (2%) + Large (4%) Stress: 6%
- Little (33%) + Moderate (15%): 48%
- No Stress at all: 46%

See attached Document 2 (Teens and Young Adults Research Finds Mental Health Top of Mind Among Young People).

Question 2. Please list the titles of all research Snap has conducted in the last 18 months about mental health and its users.

Answer. Below please find the titles of research Snap has concerning the effect of Snapchat on mental health and emotions of its users.

- 1) Teens and Young Adults Research Finds Mental Health Top of Mind Among Young People (Document 2)
- 2) Apposphere: How the Apps You Use Impact Your Daily Life and Emotions (Documents 3 and 4)
- 3) Fentanyl Research (Documents 5 and 6)
- 4) Coping During Covid: How the Pandemic Changed Video Consumption (Document 7)

- 5) Family Online Safety Research, available at Managing the Narrative: Young People's Use of Online Safety Tools
- 6) Demystifying the Snapchat Generation (Document 8)
- 7) Next Gen: The Reinvention of Friendship (Document 9)
- 8) Foundational Research (Document 10)
- 9) The Friendship Report (Documents 11 and 12)

DOCUMENT 2



Interested Parties

Snapchat & Global Strategy Group
June 10th, 2020
Teens & Young Adults Research Finds Mental Health Top of Mind Among Young People

Late last year, Global Strategy Group (GSG) partnered with Snapchat on a multi-phase research project to understand how teens and young adults, think, talk about, and approach mental health and wellbeing. The research consisted of six triads (small, 3-on-1 focus groups), two online discussion boards (3-day, interactive chats), and an online survey among teens and young adults ages 13 to 24 across the country. Key findings from this research are detailed in the pages that follow.

The research overwhelmingly demonstrated that mental health is a key if not the key issue affecting teens The research overwhelmingly demonstrated that mental health is a key if not the key issue affecting teems and young people across the country today. We saw extremely high levels of young people reporting that they have experienced stress, anxiety, depression, and even suicidal thoughts in this research. Now, young people's lives have been rocked by the coronavirus pandemic and most have been disconnected—at least physically—from their friends, family members, and support systems and face mounting uncertainty around school, work, and what their futures hold. Given all of this, we expect wellbeing and mental health to be even more prominent as top issues now than they were at the end of 2019. As young people and the rest of the country continue to navigate this "new reality" over the coming months, supports like Snapchat that provide a way for friends and family members to connect with and support each other will be paramount. each other will be paramount.

Young people are incredibly attuned to and deeply affected by issues around mental health and wellbeing. Issues around mental health and wellbeing are of the utmost importance to young people, who bring up these topics unaided and consider them among the most serious issues affecting people their age (far above other issues like drugs, discrimination, or teen pregnancy). These issues touch almost all young people so lives in some way: in the last 12 months, a staggering 83% of young people report experiencing stress, 69% say they have experienced anxiety, 57% have experienced depression, and 39% have had suicidal thoughts.

Top problems facing young people:



But young people don't use the term "mental health." Throughout the research, we found that teens and young adults are much more likely to isolate specific experiences, like stress, anxiety, depression, or suicidal thoughts, than they are to talk about "mental health." These are the experiences that they believe are the most common and closest to their own lives. It will be important to call out these experiences (particularly stress, anxiety, and depression, which are viewed as the most problematic and the issues young people report having experienced the most) under the mental health "umbrella" out by name in order to get the broadest buy-in for Snap's initiative.

- Experiences related to mental health have become more prominent in pop culture, helping teens and young adults to recognize and Identify these experiences. Previously taboo and less familiar, the injection of anxiety, depression, suicide, and other mental health-related issues have helped to define these experiences for teens and young adults through shows and movies like 13 Reasons Why, The Politician, Modern Love, and The Joker that openly address mental health, as well as songs by Logic and Selena Gomez. Developing original Snap content that touches on these topics could be a natural continuation of these public conversations.
- Young people do not reflexively view celebrities or influencers as credible messengers on mental health, despite its presence in pop culture. This came through clearly in both the qualitative and quantitate phases of the research young people don't believe that celebrities and influencers can really understand what they're going through, and celebrities talking about these issues can come off as inauthentic and even attention-seeking if it does not come from a genuine, relatable place. There are some public figures, like Selena Gomez or Demi Lovato, who could credibly talk about mental health because young people know that they have gone through their own struggles. Young people say they want to hear from people like them or people close to them about these issues, so it will be important for Snap to be mindful of this sensitivity in looking for potential partners or spokespeople for its engagement.
- Young people are accustomed to pairing content with resources around mental health. They say they are used to seeing connections to resources go along with shows or movies (i.e. listing URLs for mental health websites or showing suicide prevention hotline numbers at the end of an episode that touched on mental health, etc.) This type of pairing is something young people would intuitively understand and almost expect if Snap were to share content on these issues. There may be an opportunity for Snap to build out similar offerings (such as swipe ups that link to resources) that elevates issues around mental health and wellbeing through their platform.
- The quality and availability of formal resources like therapists, school counselors, and hotlines varies significantly. In our triads, it was very evident from some of the participants that resources are spread very thin. Counselors and even suicide hotlines have long waiting lists, and when issues such as school suicides arose, many young people felt their school didn't respond appropriately or do enough to supports students. Some young people said they rely on internet searches and forums like Quora when they need more information, but very few pointed to specific resources, apps, or outlets as trusted places to find this information. There may be an opportunity for Snap to even out this disparity and educate leens and young adults about existing resources or look to provide micro-curriculums for schools or individuals who want to help their friends or family.
- Some young people simply aren't ready to talk to anyone outside their inner circle. Because most young people have been affected by issues such as depression, stress, or anxiety, many are extremely willing to engage in the wider conversation around these topics. Despite this emotional fluency, these issues are still intensely personal for many young people, who say that if they were to talk about their own struggles or issues, they'd do so with the people closest to them or try to work out the problem on their own rather than talk to a therapist, counselor, or psychiatrist. The idea of developing safe spaces where young people can safely and anonymously unload their issues came up repeatedly in this research.

Friends, rather than formal supports, are viewed as a first port of call and best source of help for young people. Teens and young adults rely heavily on their close friends – and get and give support to this intimate group. The "boost" that they receive from their close friends is invaluable, and young people see their close friends and family as both their first line of support (the first people they'd go to if they had an issue or problem to do with mental health) and the people they feel would be most helpful in working through the issue, even over more formal support such as a therapist, psychologist, teacher, or counselor.

First Person I'd Go to for Help: Most Helpful Person/Thing: My best friend 41 19 My parents 18 My closest friends or friend group My sibling or siblings A school counselor or psychologist A teacher, coach, or mentor Another close relative Other None of these Friends/family A therapist/psychologist People with similar experiences Guidance counselor/teacher Other None of these 22 3

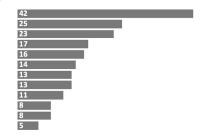
Teens and young adults see their friends as the most positive forces in their lives. Young people say they are consistently reinforcing each other – this helps them start their day off on the right foot, builds confidence, and just makes them feel good. It could be anything from texting each other gym selfles, asking to go for a walk when they know the other person is stressed, or sending a "good morning" message every day. In the survey, "support" (rather than advice, resources, or tools)

was overwhelmingly seen as the most important thing young people needed and could provide their friends if they were experiencing an issue or problem. Snap could look to build out tools for young people to continue to support each other, potentially through a "Be a Booster" style campaign (i.e. filters, streaks, etc.).

Support
Guidance
Comfort
Help
Acceptance
Compassion
Empathy
Advice
Resources
Affection
Education

ducation Tools

Most



Important Thing to Provide:

Yeah of course im in loss rin. Is everything okay? what is be?
I'm just really stressing about school my dad is

mad at mc-And some other stuff happened

Yeah.

Okay. Just breathe. Take a break if you can Pis eat something, drink water,

nap if you have the time
Or journal about it!!!

Y 111 try

Gym works for
Forctime?

(Aight!

- Having someone to unload to is seen as an important first step in addressing problems and something young people value in their close friends. Teens and young adults look to friends (specifically their 'best friends') when they just want to get things off their chest. Young people just feel better when they have someone to talk to about what they are feeling or experiencing. As one teen girl in our online discussion board said, 'being able to have a good listener to me is the best thing.' There may be an opportunity to recreate this feeling by building a resource into Snap where kids can just unload and get things off their chests. Participants suggested everything from in-app confession-style offshoots to one-one-one chats with experts or bots to dedicated message groups of young people with shared experiences.
- Beyond talking with friends, being able to step outside the chaos of day-to-day life and find ways to feel happy is also appealing to young people. Many recognize that small changes from getting out of the house to mediating can help people get out of a funk or better tackle balancing school, relationships, job hunting, and more. They look to do things or be around people that make them feel happy, from hanging out with friends, to working out or playing sports, to listening to music or podcasts.
- There is some interest in offerings around meditation and mindfulness, but these concepts are less familiar to teens and young adults. In our qualitative phase, some though certainly not most of our participants mentioned meditation and apps like Calm and Headspace as other ways to find a reprieve from the day-to-day chaos, but our survey revealed that among young people overall, many are unaware of tools like Headspace (just 22% of young people are familiar with Headspace and only 4% are daily users) or don't feel connected to the idea of mindfulness and meditation. In building out these types of offerings, Snapchat should look to make meditation and mindfulness fit in more seamlessly with how young people want to make time for themselves by taking breaks or timeouts, tackling stress, or getting out of their own heads, rather than calling it "meditation."
- Young people see Snapchat as "fun" and "funny", so incorporating humor and positivity can be an important way to make Snap's engagement around mental health feel authentic. Compared to other apps, Snapchat is something most young people have and use regularly and they use it in ways that makes it feel the most like "real life." It will be important for Snap's communication to balance the seriousness of issues related to mental health and wellbeing with the humor and playfulness that teens and young adults associate with Snapchat in order to be well-received.
- It makes sense to young people that Snapchat would do something around wellbeing and mental health. Young people (particularly teens) are constantly on Snapchat, and many use it as their main form of communication with their friends. This offers a real opportunity for Snap to reinforce this connectedness and create a powerful, authentic space to approach conversations around mental health. In our survey, 77% of young adults say they felt positively about Snapchat engaging on these topics, including 45% who said they felt "very positive." In a world where everything else they put out on the internet can live online forever, Snapchat's lack of permanence is appealing and works well with the anonymity and trust they feel are critical when it comes to talking about mental health. (Per above: just don't call it "mental health!")
- Young people see a role for Snapchat in providing an anonymous outlet and a place to go to for resources or positive inspiration and interactions. On the whole, young people saw two

standout benefits to Snap's potential engagement: that it would be instantaneous (because "seeing a therapist can take time," not to mention cost money), and either temporary or anonymous (a "more casual way of asking for help" so their peers could be comfortable unloading without worrying about it being shared widely or living on the internet forever). Participants suggested ideas like a "massive group chat" or "portal" for young people to connect to get help when they need it as well as more regular, positive interactions such as "some sort of feature of daily inspiration," stories on the Discover page, or a "tip of the day."

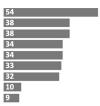
There is room to incorporate advice from mental health experts. Issues like depression and suicidal thoughts are seen as the most serious under the mental health "umbrella," and suicide is a top issue that young people feel they would like Snapchat to address despite the fact that suicidal thoughts are less commonly reported then stress, anxiety, or depression among young people. While young people rely on their friends to help them work through some of the toughest issues that they experience, they can sometimes feel out of their depth, especially around topics like suicide and dark or suicidal thoughts. Understanding when to ask for more help for themselves or their friends and knowing where they should go for help dealing with these most serious problems is important to young people, and something Snap could help provide. It should be noted, however, that experts (and as we note above, celebrities), should not be the main messengers behind Snapchat's effort – young people want to hear from people like them and close to them about these issues.

Top issues that Snapchat should address:

pchat should address:

Depression
Anxiety
Suicidal feelings
Negative body image
Bullying
Negative self-esteem
Stress
Eating disorders

Snapchat shouldn't address any of these



RESEARCH METHODOLOGY

GSG conducted six triads, two online discussion boards, and an online survey among teens and young adults ages 13 to 24 across the country from October to December, 2019.

- The **triads** were conducted among the following audiences:

 Allanta, GA: African American young women 18-24 and African American teen boys 13-17;

 Milwaukee, WI: White young men 18-24 and white teen girls 13-17;

 Los Angeles, CA: Hispanic young women 18-24 and white teen boys 13-17.

- The **online discussion boards** were segmented as follows:

 Teens: Regular Snapchat users ages 13-17

 Young adults: Regular Snapchat users ages 18-24

- The methodology for the **online survey** is as follows:

 Nationally representative survey of 1,002 Americans ages 13 to 24

 Fielded December 16th to December 19th, 2019

DOCUMENT 3

11/1/21, 3:00 PM

[US] Apposphere: How the Apps You Use Impact Your Daily Life and Emotions



January 8, 2019 1/08/2019

Apposphere: How the Apps You Use Impact Your Daily Life and Emotions



We partnered with Murphy Research to understand how and why people tap into their favorite apps.

Apposphere, our quantitative and qualitative study of 1,005 app users aged 13-44, revealed three key insights around why users choose the apps they use, when they spend time on each, and how each app makes them feel.

The apps people use can impact their moods

In a world of apps that can make people feel anxious, isolated, or self-conscious, Snapchat is fundamentally the "feel-good" app. 95% of Snapchatters say the app makes them feel happy, more than any other app tested. Users also report feeling playful and silly while using it — likely because it's a place where you can be yourself, stay close with good friends, and share your day-to-day. Here's the full breakdown of how people reported the way they feel while using each platform:

Snapchat is associated with feeling happy, playful, and silly, while **YouTube** captivates and entertains.

TOP ATTRIBUTE INDEX SCORES BY APP 3 0 0 0 **(** SILLY ANXIOUS INSPIRED INSPIRED INFORMED CREATIVE ATTRACTIVE OVERWHELMED EXCITED ADVENTUROUS GUILTY ADVENTUROUS FLIRTATIOUS FLIRTATIOUS HAPPY FLIRTATIOUS SELF-CONSCIOUS EXCITED HAPPY SELF-CONSCIOUS CREATIVE CREATIVE ENTERTAINED SPONTANEOUS DEPRESSED SMART ATTRACTIVE LONELY

Source: 2018 U.S. Murphy Research study commissioned by Snap Inc.; n = 1,005 among users of each app. How often do you feel each of the following emotions when you are using [APP]?

People have access to an endless supply of apps. This means that attention is highly fragmented — to the point where it might not be entirely clear what emotional impact any one app might have on you at face value. To choose the apps that make you feel good, you need to understand the purpose and impact of each one.

There's a reason users tap on each app

11/1/21, 3:00 PM

[US] Apposphere: How the Apps You Use Impact Your Daily Life and Emotions

- Snapchat is for conversations between close friends, as well as for playing with Filters and Lenses.¹
- Twitter is for keeping up with current events or following discussions.¹
- YouTube is for learning about new products or topics of interest.¹
- Facebook is for keeping up with family and events.¹
- Instagram is for influencer and celebrity content.¹



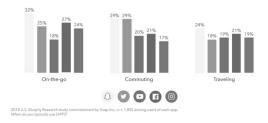
There's a time and place for each app in this space

Murphy Research's findings also revealed that people use different apps depending on what they're up to. Snapchat, followed by Twitter, are the apps most used while on-the-go, commuting,

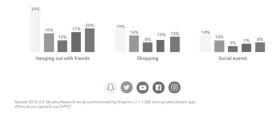
11/1/21, 3:00 PM

 $\hbox{[US] Apposphere: How the Apps You Use Impact Your Daily Life and Emotions} socializing, and shopping. However, when users are idle, they're more likely to be on Facebook, Instagram, and YouTube. }^1$

Snapchat is for moments on the move.



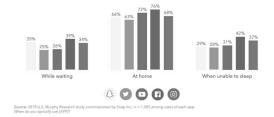
Snapchat is preferred by users when socializing and shopping.



Facebook, Instagram, and YouTube help users pass the time.

11/1/21, 3:00 PM

[US] Apposphere: How the Apps You Use Impact Your Daily Life and Emotions



The more apps become a part of our daily lives, the more important it is to gain insight into the role they play in how we behave and feel. Understanding how and when you turn to different platforms — and their individual impact — can help you make the choices that are right for you.

Snapchat can help your small, medium or large business grow.

Create an ad

[US] Apposphere: How the Apps You Use Impact Your Daily Life and Emotions

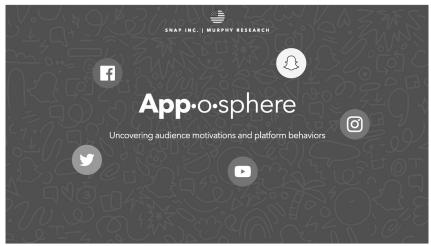
 1* 2018 U.S. Murphy Research study commissioned by Snap Inc.; n = 1,005 among users of each app*

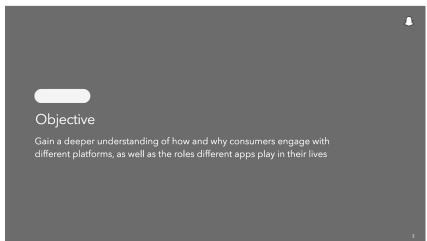
Company	Community	Advertising
Snap Inc.	Support	Buy Ads
Careers	Community Guidelines	Advertising Policies
News	Safety Center	Political Ads Library
		Brand Guidelines
		Promotions Rules
Legal	Language	
Privacy Center		
Cookie Policy	English (United States) 🗸	

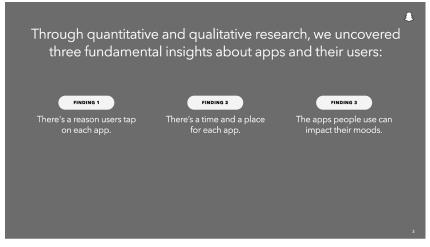
Report Infringement Custom Creative Tools Terms Community Geofilter Terms Lens Studio Terms

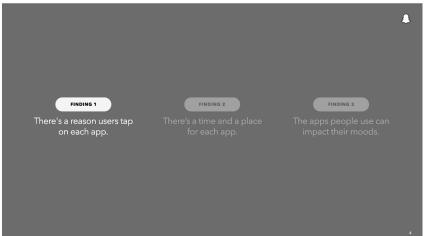
Privacy Policy Terms of Service

DOCUMENT 4









Snapchat is for conversations with close friends.

Twitter and **YouTube** are for learning.

Facebook is for events and family.

Instagram is for influencers.

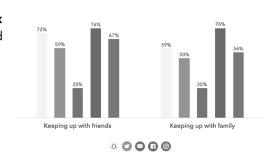
Source: 2018 U.S. Murphy Research study commissioned by Snep Inc.; n = 1,005 among users of each app

(1) What do not also have the same user (4,007)



3

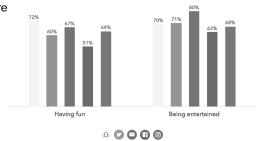
Snapchat and **Facebook** are for staying connected with the people who matter most.



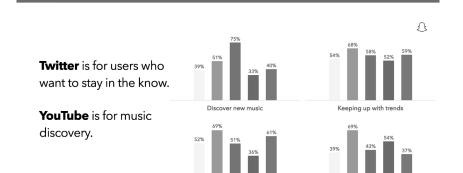
icones: 2018 U.S. Marphy Research study commissioned by Srap Inc.; n = 1,005 among users of each Tri Words are use (APPT) 6

 \bigcirc

Snapchat and **YouTube** are the go-to apps for users in search of fun and entertainment.



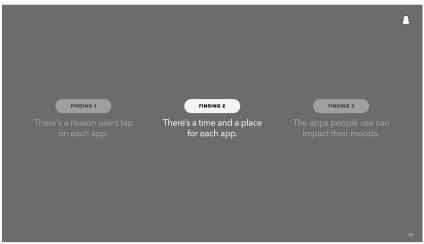
△ ♥ • • • •



Source: 2018 U.S. Murphy Research study commissioned by Snap Inc.; n = 1,005 among users of each ap Ω : Why do you use $(APS)^2$

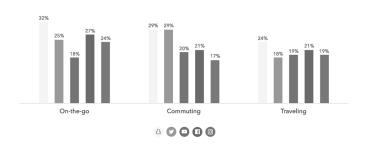
8





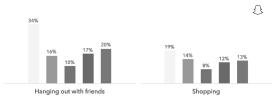
0

Snapchat is for moments on the move.



Snapchat is

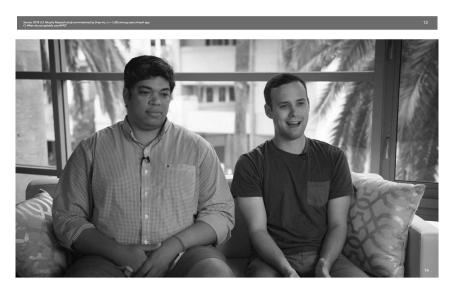
preferred by users when socializing and shopping.

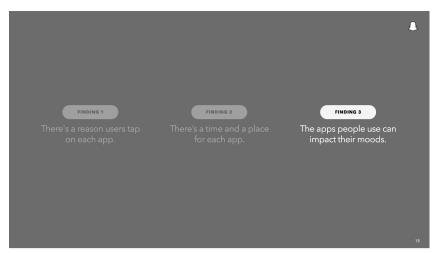




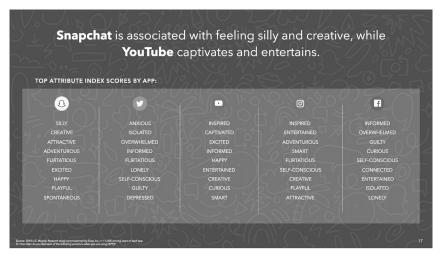
Facebook, **Instagram**, and **YouTube** help users pass the time.

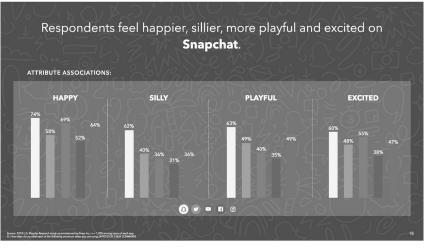


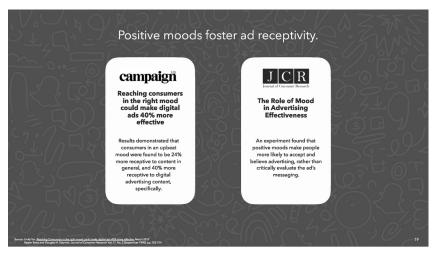






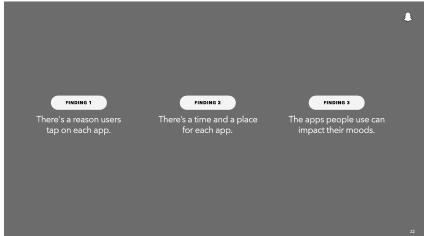


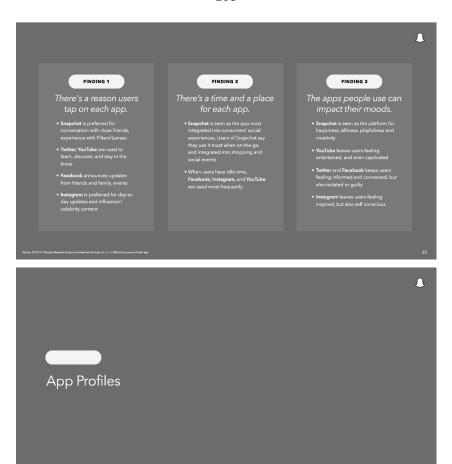


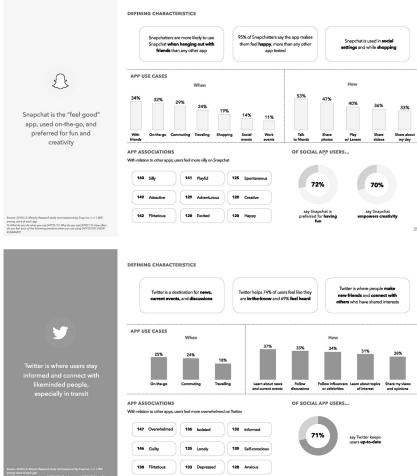




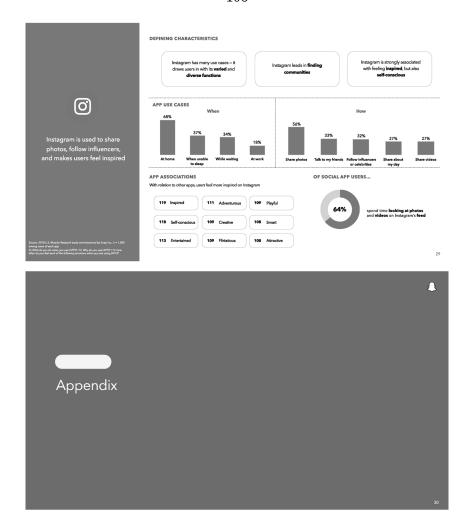


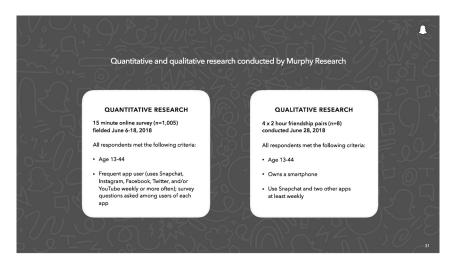












DOCUMENT 5



Situational Overview

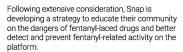
Amid a national trend of accelerating drug-related deaths, communication from federal officials indicates that counterfeit pills appear to be driving a recent increase in deaths across the nation.

Overdose Deaths Accelerating During COVID-19

DEA Issues Warning Over Counterfeit Pills



Feds Warn of Trend in Overdose Deaths Tied to Counterfeit Pills







BREAKWATER &

Research Overview

Objectives

- Gauge perceptions on topics related to drug-safety and culture, specifically regarding prescription pills.
- Understand the extenuating factors that may lead someone to try prescription pills.
- Determine educational messaging that decreases the probability that someone would try prescription pills without a prescription.

Methodology

Phase 1: Qualitative (Focus Groups) Phase 2: Quantitative (Survey)

Phase 1: Qualitative Research
The findings presented in this document are based on four 90minute online sessions with Young Adult (ages 18-24) and Teen (ages 13-17) audiences.

Participants were recruited from across the country and were all aware of Snap, with most using the app at least

BREAKWATER {}

Key Findings

- Young people are aware that prescription drug abuse is occurring among their peers, but there is limited knowledge of the prevalence of counterfeit pills.
- Nearly all mentioned dealing with stress in various aspects of life, along with difficulty speaking openly with friends and/or family about personal mental health.
- Many young people cite mental health challenges like stress and anxiety as reasons that their peers 3
- Overall, there is limited knowledge of fentanyl, but most young people are aware it is a dangerous substance because they have heard about fentanyl-related deaths via news reports.
- Messages that try to inform audiences, rather than scold or scare, are most effective. Young people want to hear facts, and some are listening for exaggerated claims which can undermine credibility. 5

BREAKWATER &

Most teens and young adults are aware of prescription drug abuse, and many say it would be easy to access medications illegally

Nearly all participants were familiar with the idea of others in their age group abusing prescription medication and many were aware of peers who had experimented with prescription pills.

Online-Fnahled Access

Many teens and young adults indicated that prescription drugs can be purchased through online connections on several digital communications platforms, like Snapchat, Instagram Messenger and Telegram.

"They take pictures on Snapchat and then it'll show the little Snap username. You could add this person and they'll come and deliver it, so it's becoming advertising in a weird way."

— Young Adult Female

Anxiety Medications and Painkillers

Though many young people mentioned various types of painkillers are commonly abused, Xanax tended to be the most explicitly mentioned drug.

"Those are the two big ones. And then all the big painkillers, people buy on the street, but the two biggest ones are OxyContin and Xanax." — Young Adult Male

BREAKWATER 1

Young people describe mounting stress and pressure as they manage the complexities of life

Many mentioned that although discussion about mental health and wellness has become more common and open, there is still significant social stigma that limits peers from asking for help or seeking out resources.







Stress and Pressure

All ages believe that their peers are stressed by the demands of school, suessed by the centarius of scintor, extracurriculars and social relationships. Young audiences often mentioned that it can be challenging to identify the right support resources and/or explain how they are feeling.

Perfect Aspirations

Some young people mentioned that they feel the pressure to be perfect in all that they do. Several speculated that young people may avoid seeking mental health support to preserve an appearance of perfection.

Social Stigma

Nearly all mentioned that discussion and awareness of mental health and awareness of mental heairn challenges has increased in recent years in a concerted attempt to reduce stigma, but many also mentioned that young people may still not feel comfortable asking for help.

BREAKWATER 1



Prescription medication are seen by some as a way to cope with stress and navigate mental health challenges independently

Stress and social stigma may press young people to experiment with prescription medications instead of seeking support from trusted resources.

Misguided Coping Mechanism



Many young people suggested that mental health related challenges may push some to use prescription pills as a misguided coping strategy. Peers may consider taking prescription pills as an attempt to self-medicate, rather than seeking help from parents or even friends. "People are not confident enough to go to these sources for help. There's a lot of people that are like, "I'm depressed, and I don't want my parents to know, so I'm not going to go anywhere." It's like people are embarrassed to have these issues..." - YA Male

"Going to therapy is a longer process kind of getting help that way. But drugs are a really quick fix even if it's just temporary or however long they last, it's a quicker way to feel better." — Teen Female

"It's just feeling overwhelmed and just using these drugs to cope with just things of everyday life." – YA Female

BREAKWATER (

Views on drug use are influenced by sociological and cultural factors

Many young adults cited pop culture references, especially music, as examples of drug use being glamorized, which contribute to young people looking to mimic these behaviors.

- Teenagers were especially aware of societal and cultural references that depicted high-school aged kids engaging in risky behaviors, like drug use.
- Some young people mentioned allusions to drug use in popular music when asked about why peers may be interested in experimenting with prescription drugs.
- Some participants mentioned that some of their peers may take prescriptions, such as Adderall, to increase their performance in school or work.
- Others mentioned peer pressure or a desire to appear "cool" as factors that could contribute to drug use.





BREAKWATER &

Young people are familiar with fentanyl-related deaths, but have limited knowledge on how or why they are occurring more frequently

Teenagers were less likely to know more specific details about fentanyl – like the drug's use in counterfeit pharmaceuticals – while older audiences were unsurprisingly slightly more aware of key details about the drug's lethality.

Fentanyl is Still Mysterious Most young people do not have deep knowledge of fentanyl but have general knowledge about associated dangers. Teenagers were less likely to be aware of fentanyl and therefore some initially viewed it as less dangerous than other more well-known substances like heroin.

"I don't know too much about it, I just know that I often hear about it being laced and people dying from overdoses from it." – Young Adult Female

Limited Info on Counterfeit Pills Those who do not have knowledge about fentanyl were largely unaware of details surrounding counterfeit pills and associated accidental poisonings. Many did not realize that many deaths associated with fentanyl result from counterfeit pills.

"I definitely didn't know that people was putting it into pills in place of other ingredients." – Teenage Female

BREAKWATER 💍



Young people prefer hearing unbiased facts about fentanyl rather than being corrected or talked down to

Young adults and teenagers who were more familiar with fentanyl and drug culture preferred different messaging than those with low awareness.

Overall

Indistinguishable

Young adults and teenagers were receptive to messaging about the lack of effective testing for fentanyl in counterfeit medications. This helped emphasize how deadly pills are indistinguishable from copied products.

Teens: Power and Potency of Fentanyl

Voungeroud

Younger audiences and those who were less familiar with the problem responded more positively to messaging that focused on the dangers associated with fentanyl specifically, like the power and potency of the deadly drug.

Young Adults: Unbiased Facts

Older audiences, and those with more knowledge, tended to prefer unbiased facts which present new information because they helped them understand and personally assess the incredible risks related to fentanyl.

BREAKWATER &

Audience

Specific

In their own words, most young adults and teens highlighted the small size of a lethal fentanyl dose and difficulty in testing pills

Despite notable consistency in the most mentioned ideas, Teens were more likely to emphasize the most alarming facts about fentanyl, while Young Adults were more likely to talk about how to consider the risks.

Messages Designed by Teenagers

Messages from teens often focused on key facts about the power and potency of fentanyl and emphasized the lethality of the substance.

"Regardless of where you get it, there's **no way to be sure** that any pills are safe. Fentanyl is **untraceable** and if a pill is laced you're most likely going to overdose. Fentanyl **reduces production costs** making it more likely for drug dealers to use it." — Teen Female

'think about how terrible and addictive heroin is and to multiply that by 5 even from a grain-like amount of fentanyl. I would lell them that going anywhere near fentanyl was a death wish." — Teen Male

Messages Designed by Young Adults

While many young adults also mentioned the power of fentanyl, they were more likely to contextualize risks by speaking directly to the decision-making process.

People put sketchy things in those pills. They are downers, there are better ways to handle the struggles that you turn to pills for. Dying isn't the goal of taking the pills, but it is probably going to be the outcome. If you think you need meds see a doctor'—YA Male

othcome: If you many you have made and it seems to pose a lot of risk with limited benefit, and I care about you too much to let you live without this knowledge. It takes as little as two grains of sand in the form of the drug to kill an adult human."

— YA Female

BREAKWATER &

11

Next Steps



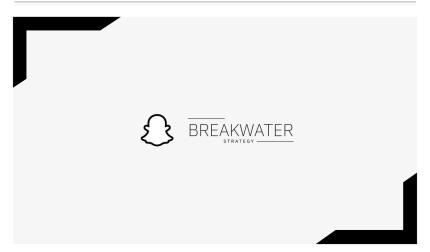
Phase 2: Quantitative Research

As we transition into Phase 2 of our research, we are partnering with Morning Consult to design and field a large sample size (n=1,500) survey among our target audience of Young Americans (ages 13-24). Through our survey, we'll develop strategic insights to support execution of an upcoming public outreach campaign and generate valuable data points for public release.

Survey Flow:



BREAKWATER (



DOCUMENT 6

Fentanyl Research

Phase 2: Quantitative Findings

August 2021



BREAKWATER

Situational Overview

Through qualitative research, we evaluated opinions surrounding counterfeit pills and mental health among Young Americans and developed several insights:

- Young people were aware that prescription drug abuse occurs among their peers, but there was limited knowledge about the prevalence of counterfeit pills.
- 2 Many young people cited mental health challenges like stress and anxiety as common reasons that their peers may turn to prescription pills.
- Most Gen Zers had heard of fentanyl but had limited information on the dangers. We identified an opportunity to educate young people about this deadly substance.
- Messages that try to inform audiences, rather than scold or scare, were most effective.

 Young people wanted to hear facts, and some were listening for exaggerated claims which can undermine credibility.

BREAKWATER &

Research Overview

Objectives

Through external research with key audiences, we aim to:

- Gauge perceptions on topics related to drug-safety, specifically regarding prescription pills.
- Understand the extenuating factors that may lead someone to try prescription pills.
- Determine educational messaging that decreases the likelihood someone would abuse prescription pills without a prescription.

Methodology

Phase 1: Qualitative (Focus Groups)

(Survey)

Phase 2: Quantitative Research

Morning Consult executed a survey among a nation-wide sample of n=1,449 Gen Zers (Americans ages 13-24) including 568 Teens (13-17) and 881 Young Adults (18-24). The interviews were conducted online from July 15th – 29th, 2021.

Results from the full survey have a margin of error of plus or minus 3 percentage points at the 95% confidence level and larger for subgroups. Some percentages may add to more or less than 100% due to rounding.

BREAKWATER (

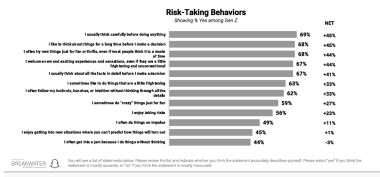
Key Findings

- Many Young Americans are open to taking risks. Understanding **openness to risk taking** among these young audiences provides valuable context for why some may consider Rx drugs as a coping mechanism.
- 2 Teens and Young Adults report high levels of stress and have mixed views on talking about mental health or seeking help.
- 3 There is widespread awareness of prescription drug abuse, although Young Americans mostly see Rx abuse as very risky.
- 4 However, youth have **incomplete information** about the dangers of Rx pills and fentanyl. Many can't rate the danger of fentanyl or have never heard of counterfeit pills.
- Within this context, 15% of Gen Zers have abused Rx medications, and 4-in-10 know someone who has done so. Prevalence of this behavior is relatively equal across many subgroups like gender, race, income and urbanization.
- Few demographics are correlated with elevated rates of Rx abuse, but individuals with high stress or comfort with high risk taking are more likely engage in this behavior, while age and educational attainment also show a significant connection.
- Counterintuitively, those who know about fentanyl and counterfeit pills are also more likely to have abused or considering abusing Rx pills. Information alone is not enough to deter all abuse.

BREAKWATER 1

Gen Zers are open to considering various risky behaviors

Young Americans typically act thoughtfully, rather than on impulse, and when they do engage in risky behavior it is normally for "fun," "thrills," or to try something "new and exciting."



Among Gen Z, high risk takers outnumber low risk takers by a 2-1 margin

Across audiences, medium risk taking is most common, while low risk taking is least common.



BREAKWATER

You will see a list of statements below. Please review the list and indicate whether you think the statement accurately describes yourself. Please select 'yes' if you think the statement is mostly inaccurate.

Most Young Americans agree that people their age feel overwhelmed and that there is a stigma surrounding mental health issues

Teens are significantly less comfortable talking about mental health issues than Young Adults.

Perceptions of Youth Mental Health Showing % NET Agree among Key Audiences	Gen Z	Teens	Young Adults
People my age generally feel overwhelmed	79%	80%	79%
There is a stigma surrounding mental health issues among people my age	56%	59%	54%
There is good access to mental health resources (therapists, counselors, psychologists/psychiatrists) for people my age	32%	32%	33%
I am confident I can handle mental health problems on my own	22%	18%	27%
People my age are comfortable talking about their mental health with others	-10%	-23%	-1%

BREAKWATER

Rased on your nersonal knowledge and experience do you agree or disagree with the following statements?

Young Americans are stressed – nearly half of Gen Zers say they average a high level of stress

Less than 1-in-4 Teens and 1-in-5 Young Adults report having a low average stress level.



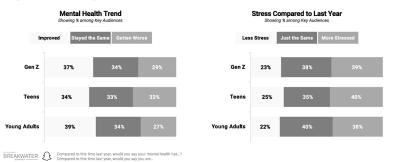


BREAKWATER {

On a scale of 0-10 with 10 being extremely stressed and 0 being not stressed at all, how would you rate your average level of stress?

While some say their mental health has improved over the last year, many also report mounting stress

Nearly 2-in-5 Gen Zers say they are more stressed this year and similar shares say their mental health has improved over the same period.



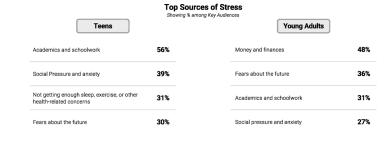
Youngs Adults are generally more likely than Teens to seek help when experiencing mental stress and anxiety

Gen Z is most likely to seek help by talking to close friends or a trusted adult – they are less likely to seek help from parents or school resources.

Likely Actions in Response to Mental Health Showing % NET Agree among Key Audiences	Gen Z	Teens	Young Adults
Talk to your close friends	+48%	+43%	+51%
Talk to a trusted adult	+14%	+2%	+22%
Seek help from a mental health professional	+5%	-8%	+14%
Talk to your parents	-1%	-8%	+2%
Seek help from school-based resources	-43%	-53%	-35%

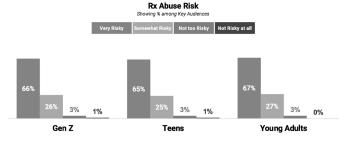
Social anxiety, academics, and fears about the future emerge as top sources of stress for both Teens and Young Adults

Money and finances rise to the top of stressors among Young Adults, while health-related concerns crack the top tier among Teens.



About two-thirds of Young Americans believe that using prescription medications without a doctor's recommendation is very risky

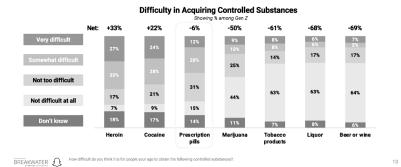
Before hearing additional information or messaging, most Gen Zers believe that taking Rx pills without a prescription is very risky.



BREAKWATER Based on what you know, how risky do you think it is to take prescription medications without a prescription from a doctor?

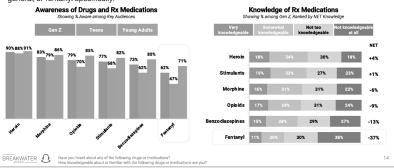
Prescription pills are seen as easier to obtain than other illicit drugs

While Rx pills are not as easy to obtain as alcohol, tobacco or marijuana, they are seen as significantly less difficult to obtain in comparison to drugs like cocaine.



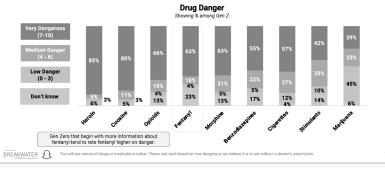
Of the drugs tested, audiences are least likely to be aware of fentanyl, and many have no knowledge about it

Gen Zers are significantly more likely to have heard and have knowledge about heroin compared to opioids in general, or fentanyl specifically.



In danger evaluation, a large share of Gen Z did not rate the danger of fentanyl revealing limited information about the substance

Cocaine and heroin saw the highest share of "very dangerous" scores and had the lowest share of "don't know" responses, illustrating the connection between information and perceptions of danger.



Most of Gen Z has heard of fentanyl related deaths, while awareness of fentanyl in counterfeit pills is least common of the tested storylines

News media, especially social media, were among most common sources of information on fentanyl among both Teens and Young Adults.



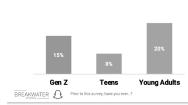
Source of Fentanyl Info Showing % among Key Audiences	Gen Z	Teens	Young Adults
News on social media	54%	49%	56%
Local news	43%	39%	45%
National news	40%	37%	42%
School programs or classes such as health class	33%	40%	30%
Posts from friends or family on social media	24%	21%	25%
Other	9%	9%	9%
Don't know	6%	12%	4%

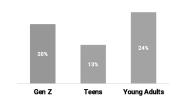
More 1-in-10 Gen Zers have abused Rx medications, while one-fifth have

Young Adults are significantly more likely than Teens to have used or thought about abusing Rx pills.









Most Gen Zers have heard of taking Rx medications without a prescription, and just under half have peers or acquaintances who have done it

Gen Zers typically hear about prescription drug abuse from content they see online or in TV and movies.

Awareness of Rx Usage Showing % Yes among Key Audiences

Source of Info Showing % among Key Audiences	Gen Z	Teens	Young Adults
Social media	62%	60%	63%
TV or Movies	46%	47%	45%
School programs	43%	49%	39%
Friends	42%	36%	45%
Local news	38%	40%	37%
Family	34%	32%	35%
National news	31%	35%	29%
Music	24%	22%	25%
Other	2%	2%	2%
Don't know	5%	7%	3%

Xanax and Adderall are mentioned most frequently, followed closely by various terms used to describe opioids – like "painkiller" or a brand name

Mentions of these three types of medications are dramatically more common than other categories.

Most Abused Medications



Top 3 Terms				
# of Mentions				
234				
111				
96				
72				
59				

BREAKWATER Which prescri

Gen Zers say people most commonly abuse Rx drugs to cope with stress

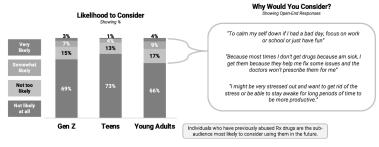
A few key reasons emerge as most common – either as self-medication, or to get "high" or party – while Teens and Young Adult have different views on experimenting, improving performance, or stopping boredom.

Reasons People Abuse Rx Medications Showing % NET Common among Key Audiences	Gen Z	Teens	Young Adults
To cope with stress and anxiety	75%	67%	78%
To get "high"	74%	69%	76%
To have fun or to party	70%	66%	72%
To experiment	51%	40%	57%
To appear cool	48%	50%	48%
To improve performance or focus	35%	29%	40%
To avoid peer pressure	33%	34%	33%
To stop boredom	33%	19%	41%

BREAKWATER &

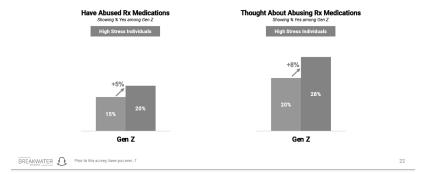
Most Gen Zers are not at all likely to consider using Rx pills in the future, although a significant share is open to the idea

Teens are generally less likely than Young Adults to consider using Rx medications.



High stress individuals are slightly more likely to have used or thought about using Rx medications

High levels of stress are linked to slightly elevated rates of Rx drug abuse and consideration.



Across several core demographics like gender, race, and income, no subgroups are significantly more likely to have abused Rx pills

Older respondents, and those with some college education, are the only demographic groups significantly more likely to have abused Rx pills.

Rx Abuse: Comparison by Demographic Subgroups

	Males	-2%
Gender	Females	+3%
	Ages 13-15*	-8%
•	Ages 16-17*	-6%
Age	Ages 18-20	-1%
	Ages 21-24*	+9%
	White	0%
Race & Ethnicity	Black / African-American	0%
(multiple responses permitted)	Hispanic	+1%
permittedy	All Other Races	+1%

	Less than \$50,000	-1%
Household Income	\$50,000 - \$99,999	+1%
	More than \$100,000	-2%
	Urban	+4%
Location	Suburban	-2%
	Rural	+1%
	Middle School*	-7%
	High School*	-4%
Education	HS Graduate	+2%
	Some College*	+7%
	College Graduate	+4%

BREAKWATER Prior to this survey, have you ever_? Used prescription drugs without a prescription

*Note: Denotes statistically significant difference at the 95% confidence interval. 23

Subgroups with high stress, high risk tolerance, or lack of confidence handling mental health issues are slightly more likely to have abused Rx pills

Recent changes in mental health show no significant connection to likelihood of prior RX pill use.

Rx Abuse: Comparison by Psychographic Subgroups Confident They Can Handle Mental Health Problems Themselves Risk Taking BREAKWATER Prior to this

Gen Zers who have abused Rx pills are also more likely to have some awareness or knowledge about fentanyl and counterfeit pills

The connection between prior use and information about fentanyl and counterfeit pills illustrates that spreading educational information alone may not dissuade use.

Rx Abuse: Comparison by Drug Knowledge Subgroups

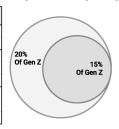


Few traits distinguish those more likely to abuse Rx pills, and most relate to mental health and drug knowledge, rather than core demographics

Besides groups with knowledge about fentanyl or counterfeit pills, high stress individuals and those who are more open to risks are among the subgroups most likely to have used or thought about using Rx pills

Have Abused or Thought about Abusing Rx Drugs by Subgroups

Subgroups More Likely to: Thought about Abusing Rx Drugs			
D	Ages 21-24	+8%	
Demos	Some College Education	+6%	
	High Stress	+8%	
Mental Health	Not confident they can handle mental health problems on their own	+7%	
	High-Risk Takers	+5%	
	Fentanyl Knowledge	+119	
Drug Knowledge	Aware of Fenta-pills	+119	
	Aware of Fentanyl	+5%	



Subgroups More Likely to: Abused Rx Drugs				
	Ages 21-24	+9%		
Demos	Some College Education	+7%		
	High-Risk Takers	+6%		
Mental Health	Not confident they can handle mental health problems on their own	+5%		
	High Stress	+5%		
	Fentanyl Knowledge	+12%		
Drug Knowledge	Aware of Fenta-pills	+10%		
	Aware of Fentanyl	+5%		

BREAKWATER Prior to this survey, have you ever_?

Nearly 4-in-5 Gen Zers learned new info from the aided prompt - Teens were slightly more likely than Youngs Adults to learn new info

Young Americans learned about how widespread counterfeit drugs are and how dangerous fentanyl is.

Aided: Learned New Information

Gen Z Young Adults

Aided: What New Information?

"Before this survey, I did not know that people were making counterfeit pills and those pills were responsible for over half of drug related deaths in America."

"I learned about counterfeit pills and how they are causing a lot of drug overdoses in places all over the US."

BREAKWATER Sased on your knowledge prior to taking this What new information did you learn?

We tested 8 informative messages about the dangers of fenta-pills

Messages Tested				
TRENDS 1	Over the last year, the country has seen a rampant increase in counterfeit pills which contain a lethal amount of fentanyl. Recent DEA lab analysis revealed more than 1-in-4 of counterfeit pills tested contain a lethal dose of fentanyl.			
TRENDS 2	According to preliminary figures released by the CDC, deaths from deadly synthetic opioids including fentanyl rose by an unprecedented 55% between September 2019 and September 2020.			
POWER 1	Picture two grains of sand, that is how little it takes for fentanyl to kill a person. Even if you split a pill in half, one part could be fine, but the other could be deadly.			
POWER 2	Fentanyl is 50 to 100 times more potent than morphine, meaning it is incredibly addictive, possibly even after one dose. Due to the lethality of fentanyl, addiction could have deadly consequences.			
HIDDEN 1	Fenta-pills are indistinguishable from the prescription pills they imitate. There is no way to know if the pill you receive is real or counterfeit.			
HIDDEN 2	There is no way to accurately test if a pill contains fentanyl. A lethal dose could be lurking in any corner of the pill.			
VICTIM 1	Teenagers and young adults are the primary target for fenta-pills. It is high achieving, ambitious people, who may take pills to help study or relax, that are being poisoned and dying from these pills.			
VICTIM 2	Criminal drug organizations use fentanyl to disguise fake products and maximize profits. These bad actors don't care if a mistake leads to death.			

BREAKWATER &

Hidden 2 and Power 2 messages scored highest among both Teens and **Young Adults on impact**

Besides those two messages, Teens and Youngs Adults ranked different messages "above average."

Messaging: Impactful Showing % NET Impactful		Gen Z	Teens	Young Adults
HIDDEN 2	There is no way to accurately test if a pill contains fentanyl. A lethal dose could be lurking in any corner of the pill.	84%	80%	87%
POWER 2	Fentanyl is 50 to 100 times more potent than morphine, meaning it is incredibly addictive, possibly even after one dose. Due to the lethality of fentanyl, addiction could have deadly consequences.	82%	78%	86%
POWER 1	Picture two grains of sand, that is how little it takes for fentanyl to kill a person. Even if you split a pill in half, one part could be fine, but the other could be deadly.	80%	80%	80%
TRENDS 1	Over the last year, the country has seen a rampant increase in counterfeit pills which contain a lethal amount of fentanyl. Recent DEA lab analysis revealed more than 1-in-4 of counterfeit pills tested contain a lethal dose of fentanyl.	80%	74%	83%
HIDDEN 1	Fenta-pills are indistinguishable from the prescription pills they imitate. There is no way to know if the pill you receive is real or counterfeit.	79%	73%	82%
TRENDS 2	According to preliminary figures released by the CDC, deaths from deadly synthetic opioids including fentanyl rose by an unprecedented 55% between September 2019 and September 2020.	78%	70%	82%
VICTIM 1	Teenagers and young adults are the primary target for fenta-pills. It is high achieving, ambitious people, who may take pills to help study or relax, that are being poisoned and dying from these pills.	76%	76%	78%
VICTIM 2	Criminal drug organizations use fentanyl to disguise fake products and maximize profits. These bad actors don't care if a mistake leads to death.	74%	72%	74%

Both Trend messages and Power 2 rank in the top tier on being informative

Teens also consider Hidden 2 and Victim 1 above average on the informative metric, while Hidden 1 and Victim 2 trail other messages.

Messaging: Informative Showing % NET Informative		Gen Z	Teens	Young Adults	
TRENDS 2	According to preliminary figures released by the CDC, deaths from deadly synthetic opioids including fentaryl rose by an unprecedented 55% between September 2019 and September 2020.	86%	86%	85%	
POWER 2	Fentanyl is S0 to 100 times more potent than morphine, meaning it is incredibly addictive, possibly even after one dose. Due to the lethality of fentanyl, addiction could have deadly consequences.	86%	84%	88%	
TRENDS 1	Over the last year, the country has seen a rampant increase in counterfeit pills which contain a lethal amount of fentanyl. Recent DEA lab analysis revealed more than 1-in-4 of counterfeit pills tested contain a lethal dose of fentanyl.	85%	78%	90%	
HIDDEN 2	There is no way to accurately test if a pill contains fentanyl. A lethal dose could be lurking in any corner of the pill.	78%	78%	77%	
POWER 1	Picture two grains of sand, that is how little it takes for fentanyl to kill a person. Even if you split a pill in half, one part could be fine, but the other could be deadly.	77%	76%	78%	
VICTIM 1	Teenagers and young adults are the primary target for fenta-pills. It is high achieving, ambitious people, who may take pills to help study or relax, that are being poisoned and dying from these pills.	76%	79%	73%	
VICTIM 2	Criminal drug organizations use fentanyl to disguise fake products and maximize profits. These bad actors don't care if a mistake leads to death.	76%	68%	79%	
HIDDEN 1	Fenta-pills are indistinguishable from the prescription pills they imitate. There is no way to know if the pill you receive is real or counterfeit.	72%	66%	78%	

Power 2, Trends 2, and Hidden 2 are among the top scoring messages for both Teen and Young Adult audiences

Trends 1 performs strongly enough among Young Adults to rank among the top performers for Gen Z overall.

Messaging Index Scores Showing Index Score (NET Impactful + NET Informative)		Gen Z	Teens	Young Adults	
POWER 2	Fentanyl is 50 to 100 times more potent than morphine, meaning it is incredibly addictive, possibly even after one dose. Due to the lethality of fentanyl, addiction could have deadly consequences.	1.68	1.62	1.74	
TRENDS 1	Over the last year, the country has seen a rampant increase in counterfeit pills which contain a lethal amount of fentanyl. Recent DEA lab analysis revealed more than 1-in-4 of counterfeit pills tested contain a lethal dose of fentanyl.	1.65	1.52	1.73	
TRENDS 2	According to preliminary figures released by the CDC, deaths from deadly synthetic opioids including fentanyl rose by an unprecedented 55% between September 2019 and September 2020.	1.64	1.56	1.67	
HIDDEN 2	There is no way to accurately test if a pill contains fentanyl. A lethal dose could be lurking in any corner of the pill.	1.62	1.58	1.64	
POWER 1	Picture two grains of sand, that is how little it takes for fentanyl to kill a person. Even if you split a pill in half, one part could be fine, but the other could be deadly.	1.57	1.56	1.58	
VICTIM 1	Teenagers and young adults are the primary target for fenta-pills. It is high achieving, ambitious people, who may take pills to help study or relax, that are being poisoned and dying from these pills.	1.52	1.55	1.51	
HIDDEN 1	Fenta-pills are indistinguishable from the prescription pills they imitate. There is no way to know if the pill you receive is real or counterfeit.	1.51	1.39	1.6	
VICTIM 2	Criminal drug organizations use fentanyl to disguise fake products and maximize profits. These bad actors don't care if a mistake leads to death.	1.50	1.4	1.53	

Note: Yellow highlighting denotes above average score among audience. 31

Both Trend messages, Power 2, and Hidden 2 perform well across most important subgroups

Victim messages that focus on bad actors score well among High Risk Takers but generally have limited appeal.

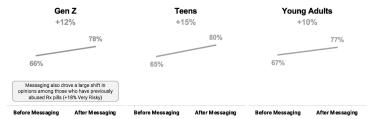
Top Messages by Subgroup Showing Messages Ranked by Index Score (NET Impactful + NET Informative)		Have Used Rx Drugs	High Stress	High Risk Takers	Fentanyl Informed	Aware of Fenta-pills
TRENDS 1	Over the last year, the country has seen a rampant increase in counterfeit pills which contain a lethal amount of fentaryl. Recent DEA lab analysis revealed more than 1-in-4 of counterfeit pills tested contain a lethal dose of fentanyl.	√	✓	√	✓	√
TRENDS 2	According to preliminary figures released by the CDC, deaths from deadly synthetic opioids including featnaryl rose by an unprecedented 55% between September 2019 and September 2020.			✓	✓	✓
POWER 1	Picture two grains of sand, that is how little it takes for fentanyl to kill a person. Even if you split a pill in half, one part could be fine, but the other could be deadly.	✓	✓			
POWER 2	Fentanyl is 50 to 100 times more potent than morphine, meaning it is incredibly addictive, possibly even after one dose. Due to the lethality of fentanyl, addiction could have deadly consequences.	√	✓		✓	✓
HIDDEN 1	Fenta-pills are indistinguishable from the prescription pills they imitate. There is no way to know if the pill you receive is real or counterfeit.	✓				
HIDDEN 2	There is no way to accurately test if a pill contains fentanyl. A lethal dose could be lurking in any corner of the pill.	✓	✓	√		✓
VICTIM 1	Teenagers and young adults are the primary target for fenta-pills. It is high achieving, ambitious people, who may take pills to help study or relax, that are being poisoned and dying from these pills.			√		
VICTIM 2	Criminal drug organizations use fentanyl to disguise fake products and maximize profits. These bad actors don't care if a mistake leads to death.			√	√	

BREAKWATER How IMPACTFUL is this statement? How INFORMATIVE is this statement

Learning about fentanyl increases Gen Zers perception that taking prescriptions without a prescription is risky

Substantial movement from "somewhat" to "very" risky indicates that messaging effectively shift opinions.

Pre/Post: Prescription Medications Risk



Implications

- 1 We should look to close the noticeable **information gap** among young Americans on the dangers of fentanyl generally and the concept of counterfeit pills specifically.
- Education itself might not be sufficient to curb Rx abuse, especially because audiences with increased knowledge of the dangers of fentanyl and counterfeit Rx pills are among the most likely to have abused Rx medications previously.
- 3 Due to the **limited variation** in Rx abuse across audience segments, **widespread communication** will be more valuable than targeting specific demographic subgroups.
- 4 Engagement should also aim to address underlying psychological drivers of Rx drug abuse like willingness to accept risk, and high levels of stress.
- 5 Without a clear solution or identifier, parents, educators, and other stakeholders will have to grapple with the difficult reality that Rx abuse could impact children or young adults in their lives directly or indirectly.

BREAKWATER 🐧

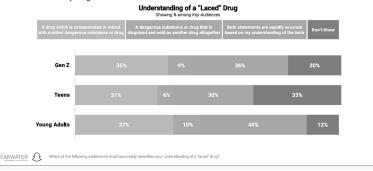


Appendix

BREAKWATER 🗘

Views on the meaning of the term "laced" are mixed, while most think the term has some connection to contamination or mixed substances

 $Teens \ are \ less \ likely \ to \ have \ well formed \ opinions \ on \ the \ meaning \ of \ laced, showing \ opportunity \ to \ define \ the term in \ the \ minds \ of \ young \ audiences.$



DOCUMENT 7





Table of Contents

- 5 Executive Summary
- 6 The New Video Landscape
- 18 Video Immersion
- 25 Social Justice

X OMG Omnicom

The COVID pandemic changed not only how we watch video, but where, when and why

As a result of the unprecedented COVID-19 pandemic and quarantine, fundamental mobile behavior shifts are occurring among US consumers – particularly Gen Z and Millennials.

Reveal emerging video consumption trends among Gen Z and Millennials

Evaluate the impact of video-based social media platforms on frustration and other emotions

Identify whether brand involvement with social justice causes is well-received by young consumers



Approach

Quantitative Methodology

15-minute online survey, conducted by independent research firm Alter Agents July 29 - August 5, 2020



Respondent Qualifications:

- Age 13-34
- Smartphone users
- Regular mobile video consumers (multiple times per day)
- Sensitive industry screen



Total interviews: n=1000

- Daily Snapchat Video Users: n=500
- Daily Competitive App Video Users: n=500

Neurological and Qualitative Methodology



30-minute IDIs, conducted by independent research firm Alter Agents September 28 - October 6, 2020



Respondent Qualifications:

- Age 13-34
- Smartphone users
- Regular mobile video consumers (multiple times per day)
- Sensitive industry screen



Total interviews: n=35

EX OMG Omnicom

Executive Summary



COVID-19 has significantly increased video consumption among Gen Z and Millennials, with a focus on mobile and social media video content. Over half of both Gen Z and Millennials say this increased viewing is here to stay.



Gen Z and Millennials watch video on platforms for different reasons, from entertainment to connecting with family. Immersion data shows that consumers are highly engaged while watching videos on social media apps. Viewer social media apps. Viewer attention on social media apps dips during ad experiences and during longer videos, but still outperforms industry benchmarks.



Ongoing conversations about social and political issues have also impacted video consumption habits, with Gen Z and Millennials responding positively to creators and brands engaging with social justice issues.



The New Video Landscape

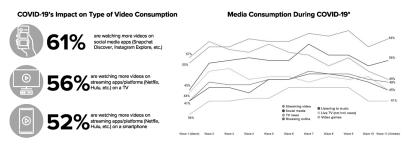
Reveal emerging video consumption trends among Gen Z and Millennials



CONFIDENTIAL

X CMG Omnicom

COVID-19 led to increased video consumption, especially on social media apps



Base Total Reportation jn MCOD, Witchins Video on Social Medica App 1-MS, Witchins Video on Discosing Appointment on TV jn-887).

CIC: Now we went to see up used both ow the COVID per planetist less affered by we went video, and, it also April a video on search of the following because of the COVID-9 pandemic?

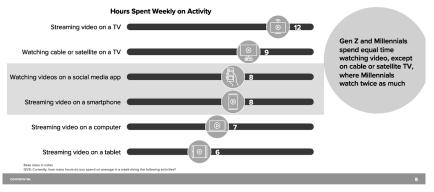
CIC: All any used byte process, was, or the same amount of each of the following because of the COVID-9 pandemic?

CIC: All any used byte process. A covid of the Social Soc

CONFIDENTIAL

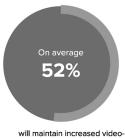


Gen Z and Millennials spend multiple hours per day watching video on smartphones and/or social media apps



X CMG Omnicom

Millennials are more likely to maintain increased viewing



will maintain increased videowatching on social media apps Gen Z 50% Millennials 60%

Base sizes in notes

CCS: Now do you think this change in how you use these apps for watching videos will carry forward after the pandemic, when old lifestyles begin to resur

CONFIDENTIAL



On platforms not devoted to video, users still spend more than half their time watching videos

70%

Average time spent on apps watching videos

4.3

Average hours per week spent watching videos on app

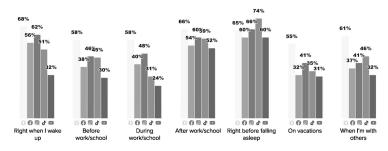
deter states in cross.

MRI: On average, how many hours per week do you spend using the following apps on your phone?

GMVI: For each app that you use, about how many hours per week on average do you spend watching videos on each of the following apps:

X OMG Omnicom

Each app is used at different points during the day, but Gen Z and Millennials tend to check them all right before sleep



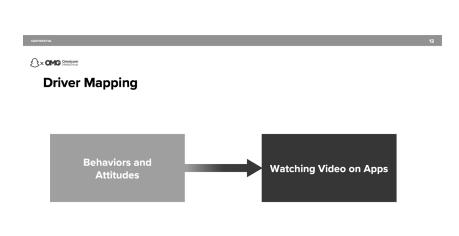
Base: Snapchat (n=313), Facebook (n=267), Instagram (n=323), TikTok (n=359), YouTube (n=45 QM3: During which of the following instances do you use (APPI?

A/♥ Indicates significantly higher/lower than Millennials at a 95% level of confidence

EX OMG Omnicom

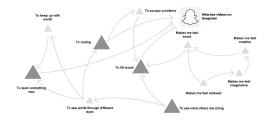
Users turn to video on apps for different reasons





X OMG Omnicom

Gen Z and Millennials watch video on Snapchat to feel creative and relieve stress

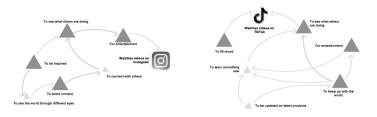


Strong driver
 Medium driver

CONFIDENTIAL

X OMG Omnicom

Gen Z and Millennials view video on Instagram and TikTok for similar reasons

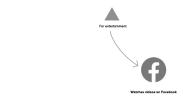


Strong driver
 Medium driver

CONFIDENTIAL



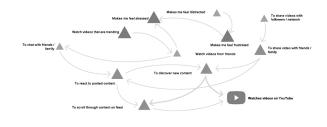
Watching video on Facebook is driven by entertainment



▲ Strong driver
▲ Medium driver

X OMG Omnicom

Watching video on YouTube can cause stress and frustration



Medium driver
 Negetive driver

CONFIDENTIAL



Video Immersion

Understanding Gen Z and Millennials' video watching





Understanding Neuro Research



Immersion measures emotional engagement and attention using cardiac variability

Immersive experiences build emotions, focus attention, enhance recall, and motivate action

Variable heart rate monitoring is achieved via an armband that measures blood flow – understanding unconscious reaction by reading what goes on in the body between heart beats

The main output is **Immersion (Attention + Emotional Response)** and is shown as a value between 0-10 with higher scores indicating higher engagement and future action

Immersion scores are reported here using the Immersion Index, which indexes Immersion scores to a scale from 0-100. The higher the number, the more immersive the experience was



Respondents engaged in organic (unguided) app use and guided tasks for 3

apps: Snapchat, Instagram, and Facebook

Organic App Use

Guided App Tasks







Discover Video Content (Snap Discover, Facebook Watch & Live, Instagram IGTV)

Search for Video Content (Snap Discover, Facebook Watch & Live, Instagram Reels)





The rise in video consumption on these platforms is further proven by how immersive these platforms are

Average Organic App Use Immersion Index Scores

All three of the apps tested are more immersive than the industry benchmarks









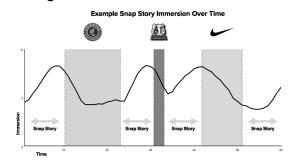
© 59



- Facebook and Instagram cause longer and more frequent instances of <u>lower immersion</u> and are **more** likely to cause negative experiences that lead to
- Snapchat causes longer and more frequent instances of higher immersion and is less likely to cause stress for Gen Z and Millennials

X OMG Omnicom

Immersion remains high while viewing video content, even during ads



Immersion drops across apps when viewing ads, regardless of video app platform, but generally remains higher than industry benchmarks

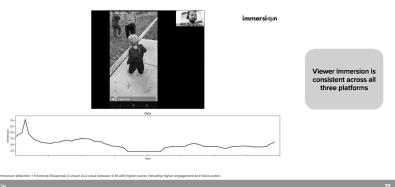


Even while viewing ads, immersion remains higher than industry benchmarks

Snapchat Ad Experience Awesome Index ₿ 68 43 Advertisements (across industries) Competitive App Ad Experience Awesome Index

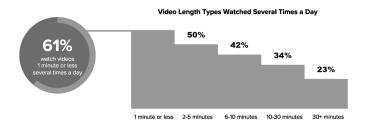


Immersion decreases the longer a video plays



X OMG Omnicom

As users lose interest the longer a video plays, shorter smartphone videos garner more attention throughout the day



Base: Total respondents (n=1000) QV7: How often do you watch the following types of videos on your phone?

X OMG Omnicom

Social Justice

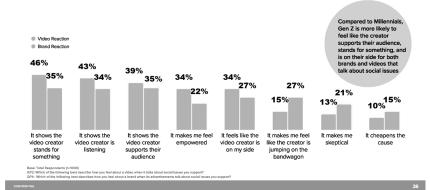
Identify whether brand involvement with social justice issues is well-received by young consumers



CONFIDENTIAL

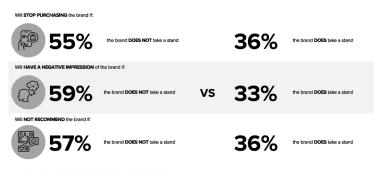


Aligning with social causes is more likely to benefit brands



X OMG Omnicom

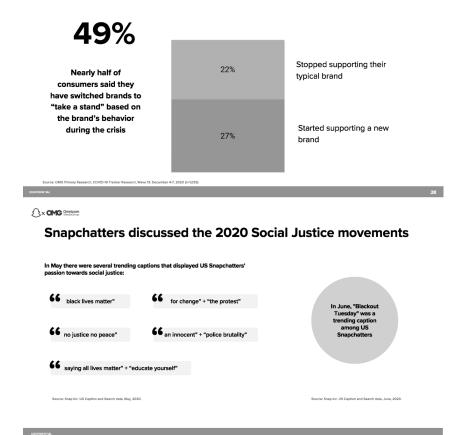
Brand loyalty is more negatively impacted by staying silent about social issues than it is when a brand takes a stand



Source: OMG Primary Research, COVID-19 Tracker Research, Wave 13: December 4-7, 2020 (n:1,03



They will even switch brands that model their values





Key Findings and Implications



Throughout the pandemic, video platforms have become a way for consumers to connect, escape, and be

inspired all at once.
And, they spend 8 hours a week consuming video on their apps/smartphones - a change they plan to continue!



Not all mobile and social video is

rvut all mobile and social video is created equal.
While some video/social apps can elicit higher levels of frustration and stress when compared to other video/social apps, it is important to note that all video platforms differ across need states, as well as time of day.



Immersion remains high throughout the viewing experience on video/social apps, BUT heavy ad loads impact viewer immersion, leading to disengagement.
Viewer engagement is strongest in the first few seconds coming out of the video content and into the ad.

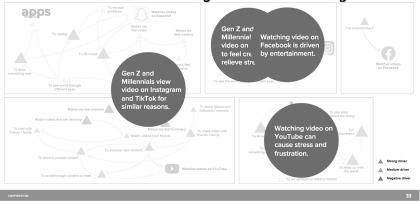


Consumers respond favorably to brands and media who take a stand on social issues they care about, and they expect it -- a brand has a lot to lose if they remain silent



X OMG Omnicom

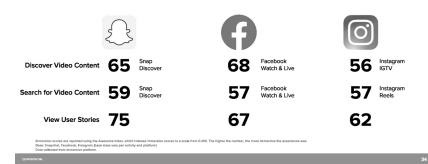
Entertainment and mood lifting drives video watching on



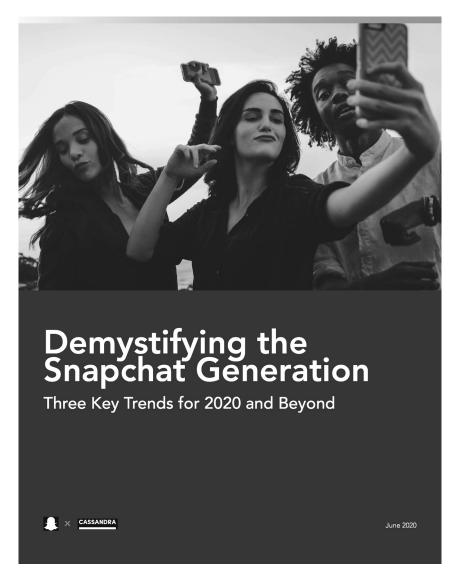
X OMG Omnicom

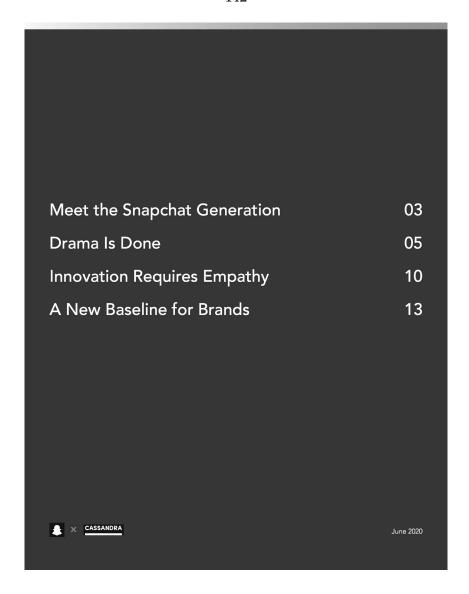
Each platform provides uniquely immersive experiences

Average <u>Guided</u> Immersion Index Scores



141 DOCUMENT 8





Meet the Snapchat Generation

By the time the oldest Gen Zs entered their teen years, Snapchat had entered their lives, changing the way young people connect and communicate going forward.

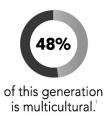
This cohort has come of age where smartphones live in their pockets and technology seamlessly permeates most areas of their lives. The Snapchat Generation is an alwaysconnected group with a unique outlook on life and a new take on brands, and they're defining the trends that will shape society and business in the next few years.

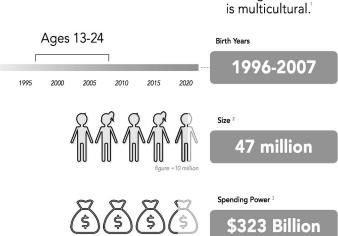
The Snapchat Generation was born into an era of chaos and overstimulation, and have come of age more connected than any cohort before them. And now, as they're approaching adulthood, the Covid-19 pandemic* hit. This is changing the way brands have to engage and interact with them as consumers. Brands no longer have the upperhand; today's young consumers do.

They're raising the table stakes and expecting brands to reflect their values to help them make the world a better place. No longer a captive audience of TV viewers, this hyperconnected (and sometimes overstimulated) group makes snap decisions on whether content is worth their time, so it's key that brands ensure that they're adding meaningful value to their life. They focus on feeling good about themselves and life in general, so ditch the drama and help them achieve happiness as your brand taps this group for their precious time and attention. And keep an eye on empathy as your brand strives toward innovation, which are key differentiators in the eyes of the Snapchat Generation.



Getting to know the Snapchat Generation





1 Pew Research, 2018 among Gen Zs gard 18-22 / 2U.S. Census Bruwsa, 2018 among Gen Zs agard 13-24 / 3 Cassandra Report, 2019 — Spendiag power for Gen Z was calculated as follows: We obtained the wavegen monthly income for each respondent in the sun of any expensive related to enter or contages, debt, incombined, personal promotives, espending monthly income. We then multiplied each respondent's average monthly discretionary spending by 12 to obtain their average yearly discretionary sonal and averaged them estells across Gen Zs and 14-52.

Drama Is Done

This generation has been through a tumultuous time.

Growing up in time of economic instability, school violence, and a global pandemic, this generation is coming of age in a time of uncertainty. Compared to Millennials, Gen Zs are much less optimistic and more realistic. However, this doesn't mean that they don't appreciate positivity.

In fact, they're a bit over the drama. This generation is quick to cancel influencers for senseless drama. They think everyone should be included and that it's important to be kind to others. It is no surprise with all the political bullyism that exists in our news cycle that 70% of Gen Zs say that politics stresses them out.⁴ The world is dramatic enough. They don't need extra drama added to their life. Drama is done, and happiness and positivity are in.

"All day you're just seeing people bickering with each other and very little harmony going on [online]... It's exhausting because all day, every day you're seeing people argue with each other and there's just not a lot of nice comments being passed around."

— Anthony, 16

"I want [brands] to **promote kindness** towards one another and encourage to help one another in this time of need [coronavirus pandemic]."

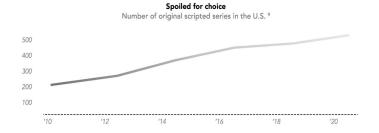
— Victor, 14 °

They describe their generation as... 7



Grab their attention with positivity & caring

Many brands and content providers are vying for the Snapchat Generation's attention. Entertainment has proliferated: in 2011, there were 266 scripted series, which doubled to 532 in 2019. Due to the abundance of content, they make snap decisions on what is worth their effort. Brands and marketers may have heard they only have an 8-second attention span, but this bingewatching generation will spend time with your content if in those 8 seconds your brand gives them something worth the duration...8 Gen Z wants to spend time more meaningfully and craves media that brings them joy, has a positive impact on their lives, and enables them to connect with others. Media needs to offer an additional benefit beyond the story, which is why they gravitate towards apps that allow for two-way communication. Engaging this generation to participate in a two-way conversation is helpful in signaling that your content is worth their attention.





Tinder Swipe Night engaged audiences with an entertaining choose-your-own-adventure and partnered with Snap to allow potential users to join in the fun



decide whether or not to watch a show in the first few seconds 10

Friends are for entertainment, not drama

Making deep, quality friendships takes longer for this generation, and they need help to drive friendships forward. The Snapchat Generation has been burned in the past by people they thought were friends, so they keep friendships on the surface level for a while prior to letting people in close. Even though text is a top form of communication, asking for a phone number can be seen as creepy¹¹, so they are more likely to stalk new acquaintances on social media first. Their next step would be to move into direct communication, such as a Snapchat direct message. If they get close enough

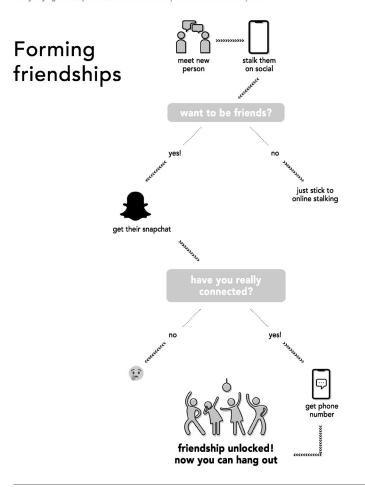
with each other, that is when a phone number would be shared to make plans and hang out.

With so much drama on the Internet, it's important to have spaces where they feel included and that enable them to drive friendships forward. Light-hearted, creative content that they share with others helps them add value to their new potential friends. Friends don't bring friends down. During conversations to move the friendship needle, Gen Z ensures they're being entertaining and helping their friends have fun.

Top 5 qualities Gen Z look for in friends 12







Technology extends Gen Z's talent for entertaining their friends

Past generations had a harder time connecting with others—for example, they would encounter busy signals—but formed deeper connections. The Snapchat Generation has been considered to be the loneliest generation despite their easy access to connect with others, they lack a true, cohesive sense of community.

They seek the same happiness in life and depth of relationships that generations before them have enjoyed and see technology as a partner in this journey. 63% say technology has enhanced the quality of their social relationships ", which is higher than any other generation.

This generation desires more valuable connectedness. Their phone provides a meaningful conduit to friends through direct messages and notifications, which help minimize their loneliness. Snap is encouraging technology to extend the entertainment through enabling Snap camera features to be accessible on webcam services, such as Zoom. This is especially helpful during the time of Covid-19, as many Gen Zs are using Zoom for the first time.



"[Through this time of isolation during Covid-19] I'm using Snapchat to keep up with my friends from college... I've participated in virtual watch parties with my friends. We watch movies through Discord and play Animal Crossing together."

— Danita, 19 16



Zelle encouraged users to help friends by sending them money when they're in a pickle. It has continued to do this throughout the Covid-19 crisis and has offered to step in as a friend itself by helping the federal government send stimulus money to citizens who are users of the app



Netflix Party App enabled friends to watch Netflix together while social distancing separately in their own homes via a Google Chrome extension

Innovation Requires Empathy

It's okay to fail, but it is not okay to fail to innovate.

This generation has grown up during a time of constant change when technology is evolving faster than ever. They don't expect brands and products to stay status quo; there is an expectation for improvement.

It is no longer necessary to get it completely right, rather this generation respects when brands are trying to evolve. They understand that behind every success are stories of multiple failures along the way, and they have more empathy for this journey.

"[Companies | like are] always introducing new items. They take chances even if they fail."

- Xavier, 15 17



respect companies that try to innovate even if they fail 18



of Gen Zs think that companies need to innovate to be relevant 19

Being human > being first

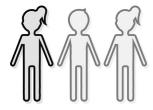
The Snapchat Generation demands to be seen as people rather than numbers to brands; they need to feel like they matter. While they appreciate speed and quickness, they also recognize the importance of human touch. When it comes to innovation, consider their needs and respond to them in a human way. This is more important than just being first to market. Communicate empathy and demonstrate that they matter to your brand by working to improve their lives through delivering happiness and convenience.

They consider a brand to be innovative when it 20

- #1. Makes life easier
- #2. Saves people time
- #3. Is first to introduce a new product before a competitor

"I like it when a sales rep involves an anecdote or tries to get to know me in a more personal way. I was shopping for this hiking backpack at the REI store downtown, and the guy there felt like this uncle that was helping me try on a backpack and it just felt real, as opposed to something transactional."

- Nick, 18, NY 21



1 in 3

want brands to treat them like human beings ²²



believe that, in the future, all brands will need to consider consumers' emotional/ mental health in order to survive ²³

Innovation requires an empathetic ear

When it comes to innovation, the Snapchat Generation expects that companies show empathy for their needs. It is incredibly important for them to feel heard by companies. These consumers are not looking to brands to tell them they care, they are looking for brands to listen to them and show them they matter through action and transparency.



of Gen Zs are more likely to support companies that make changes based on customer feedback 24

HARRY'S

Harry's provided a mental health hotline during the time of the Covid-19 pandemic to serve their customers in new ways and acknowledge their life needs beyond

Glossier.

developed new products by engaging customers in conversations about their beauty needs

"[Innovative brands] take feedback well and improve their products. They genuinely care about their customers" - Samantha, 19 ²⁵

A New Baseline for Brands

The Snapchat Generation has grown up surrounded by brands and advertising. They are hip to the game. What used to be seen as special and innovative has now become a baseline, and brands need to go beyond that baseline to prove to this generation that they are worth Gen Z's business.

Beyond the Baseline: Brand Directives

1

Go beyond tactics to a POV 2

Don't just sell, create community 3

Embrace entertainment to earn eyeballs 4

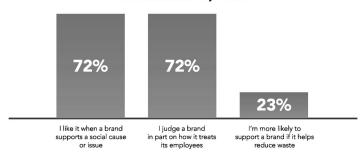
Tap into the trendsetter next door

Go beyond tactics to a POV

Long gone are the days of winning over youth by simply recycling or throwing a rainbow flag on your logo, as this generation sees that as table stakes and holds higher expectations for brands. They expect brands to give back to the community, support social causes and issues that

they care about, and treat their employees well. Recently, Snap released Here For You, a mental health support service, earlier than originally planned, to help those in need during the Covid-19 pandemic.

Care about a cause > Try a tactic 26



sg

Sweetgreen delivered free fresh food to hospitals in the cities they serve via zero-cost outposts

CHRISTIAN SIRIANO

Christian Siriano
shifted at-home sewing staff to make much
needed personal protective equipment
to help healthcare workers in the fight
against Covid-19

Don't just sell, create community

The Snapchat Generation is a cohort of educated consumers who know their their worth and want to feel valued by brands. For a generation that will exchange data for access, they expect their loyalty to be recognized and appropriately rewarded. They see rewards as part of their baseline expectations, which are an important part of the equation that make them feel included. Transform them from brand buyers into community members that want to associate themselves with your brand.

"[From brands] I hope to see donations and contributions

to the economy and the community. $\,$ We need to unite in order to control our collective future."

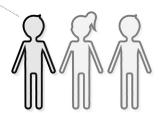
- Cannon, 21 ²⁷

1 in 3

want brands to reward them for their loyalty 28

84%

don't want to feel like brands are just trying to sell them something 29





Chipotle created Chipotle Together lunch-time video streams with celebrities for 3,000 Chipotle fans

Embrace entertainment to earn eyeballs

This generation is over the drama; they like content that makes them laugh. Ads can be fun and entertaining—and worth seeking out. In fact, the Snapchat Generation will turn to ads that they hear are funny, interesting, or quirky.

Move beyond basic advertising and enhance their lives by providing entertainment, giving them a reason to spend time with your message.



"As long as ads are entertaining, I don't mind them"³⁰



"I have looked up an ad that I heard was cool/funny" 31

Gen Zs will watch ads that are 32



65%

64%



47% creative

They generally prefer popular culture that is...³³

Light & uplifting Dark & serious

76% 24%

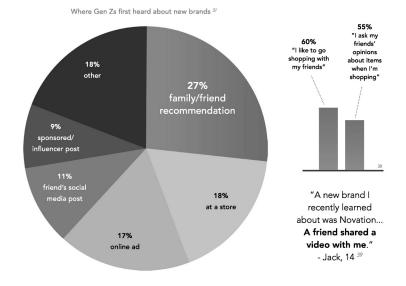
Tap into the trendsetter next door

Word of mouth has always been important for brands. Now, consumers have even more channels to share their opinions and exercise their influence over their friends and family. With 1 in 4 first hearing about new brands from friends. If friends influence both the discovery and purchase phase of the journey, and they're fun to shop with, too. Look beyond well-known influencers and

add the trendsetter next door—their friends—to your marketing mix.

73% of Gen Zs say they would like to check out a new brand if their friends are talking about it. $^{\rm 35}$

52% of Gen Zs say friends influence their purchases.36







As brands think about connecting with the Snapchat Generation during 2020 and beyond, it is important that they focus on showing empathy by making young people's lives happier and less dramatic. This diverse audience, worth \$323 billion, is looking to brands for innovation that comes with a human touch. In your marketing, consider how your brand can stand for a POV that connects with Gen Z values, remember to think about your consumer in a human way, build in opportunities for entertainment, and seed word-of-mouth sharing among friends.

ABOUT THIS REPORT

This whitepaper is compiled from three commissioned research reports that Snap conducted in partnership with Cassandra, True To Selfie, New Brand On The Block, and Innovation Generation. In addition, this whitepaper references Cassandra's proprietary insights based on its iconic Cassandra Report. Finally, we conducted additional secondary research explorations of reputable research organizations to further support this work.

ABOUT SNAP

Snap Inc. is a camera company. We believe that reinventing the camera represents our greatest opportunity to improve the way people live and communicate. We contribute to human progress by empowering people to express about the world, and have fun together.

ABOUT CASSANDRA

We empower Fortune 500 companies to See Tomorrow® through trend forecasting, research, brand strategy, and consulting services that drive innovation and build deeper engagement with youth. Cassandra is a cultural insights and strategy group within ENGINE, a global, full-service media and marketing and services company. As the leading experts on young consumers and the cultural forces shaping their lives for nearly 20 years, Cassandra is the foremost authority on themselves, live in the moment, learn Millennials and Gen Z. To learn more about Cassandra and the benefits of becoming a Cassandra client, please visit us at cassandra.co.

DOCUMENT 9



OVERVIEW

Led by the Millennials that preceded them – those who reinvigorated social change – the world's largest and most diverse generation is coming on like a tidal wave, leaving a path of continuous change in their wake. We call them Gen Z, and with every move, they are reimagining their relationships, communities, and societal responsibilities.

In line with Millennials, Gen Z is guided by their values. However, they take this one step further in demanding that companies and brands, their friends and their wider community move beyond performative activism, and into genuine action. They seek out authentic experiences to help them build friendships and foster community, and use digital camera, social, and content apps to craft a digital life more diverse and richer than can be experienced IRL. Their values inform their individuality, and they have created their own social languages that verify belonging.

As online humor, kindness, and shared values drive friendships, these friendships are no longer confined to geographic similarities or demographic makeup. Next Gen is reevaluating which communities they belong to, and are moving into and forming new value-driven communities. These communities enable them to experience diversity and express themselves in new ways, and thus, revolutionize their worldview.

FO

QUANTITATIVE PHASE

In partnership with Snap, The FQ conducted quantitative research to further explore the attitudes, behaviors, and experiences of 13-34 year olds that were discovered during the qualitative phase. The research covered the following topic areas:

Communication, camera, and social app general usage:

- Preferred online content
- How humor is used as a communication tool
- Engaging with diverse online creators and groups
- Safety and validity of shared content

Communities and friendships:

- Online and in-person memberships
- Importance of diversity and inclusion within communities
- Valued characteristics of friends

Gender equality:

- Important aspectsPreferred way to support



QUANTITATIVE METHODOLOGY

The FQ conducted 2,500 self-administered online surveys among 13-34 year old females and males in the US and France in January 2021. The demographic breakdown of completed surveys per country is as follows:

UNITED STATES

Total Females: 1000 Females 13-17: 200 Females 18-24: 400 Females 25-34: 400

*Female Daily Snapchat Users: 384

Total Males: 250 Males 13-17: 50 Males 18-24: 100 Males 25-34: 100

*Male Daily Snapchat Users: 72

FRANCE

Total Females: 1000 Females 13-17: 200 Females 18-24: 400 Females 25-34: 400

*Female Daily Snapchat Users: 477

Total Males: 250 Males 13-17: 50 Males 18-24: 100 Males 25-34: 100

*Male Daily Snapchat Users: 84



 ${
m FO}$ *Throughout this report, differences between Snapchat daily users and non-daily users are pointed out when noteworthy.

CONCLUSIONS

NEXT GEN IS VIGILANT ABOUT ENSURING THEY DON'T CONTRIBUTE TO FALSE INFORMATION IN APPS AND ONLINE

Next Gen shares their own experiences and views on apps, as well as content from others. Although the majority feel they can tell when the information they see on apps and online is not true, this is not always the case. So, before they post or repost something on apps, they are likely to check or verify to make certain the information is factual. In addition, they will take action when they see false information in apps and online.

HUMOR REALLY IS THE BEST MEDICINE

The majority of Next Gen seek out, share, and receive content on apps that makes them laugh. Their preferred forms are memes, cartoons, and videos. Humor and laughter are important for these generations, particularly in today's difficult times, and help to relieve stress, and create positive feelings.

APPS AND SOCIAL PLATFORMS ARE AN IMPORTANT KNOWLEDGE SOURCE FOR OPENING THE EYES AND EXPANDING THE WORLD OF NEXT GEN

Next Gen searches for content on apps from those who look and/or believe differently than they do. This allows them to learn about others, to see both sides of an issue, and to expand their thinking. As a result, they are becoming newly aware of social issues and new and different cultures, and are encouraging others to take action to make the world a better place.



CONCLUSIONS

COMMUNITIES SERVE AS ANOTHER CONNECTION TO THEIR FRIENDS

Next Gen primarily joins online and in-person communities for entertainment and because their friends are members, which provides them with a sense of belonging. Although less than half of females (44%) and males (40%) think it is important for diversity and inclusivity in the communities they most associate with, many will take a stand and exit a community if they don't agree with the community's views on racial justice.

FEMALES WANT DIVERSITY IN THEIR FRIENDSHIPS, WHILE MALES DO NOT

While diversity and inclusion are not important in the communities they most associate with, females feel differently when it comes to their friends: they prefer their friends to not look like them, to have a different religion from them, and to have different cultural beliefs than them. Their male counterparts, however, want their friends to be like them in these same dimensions. Similar to their actions in their communities, Next Gen females and males will terminate or distance themselves from friendships when there is a disagreement on racial justice.



WHAT WE LEARNED: U.S. NEXT GEN COMMUNICATION, CAMERA, AND SOCIAL APP BEHAVIORS

NEXT GEN ARE CREATORS AND SHARERS OF OTHER'S WORK

Next Gen is saying goodbye to needing special design classes and degrees, and is instead leaning into their ability to create meaningful content using the free tools and platforms at their fingertips.

While 41% of females overall repost other people's content most often, 38% create and/or share their own voice, experience and/or photos most often. One-half of female Millennial daily Snapchat users (51%) repost other people's content most often compared to one-third (39%) of female Gen Z.

For males, 43% tend to create and/or share their own voice, experience and/or photos most often, while 38% repost other's content most often. Male Snapchat daily users are more likely (48%) than non-daily users to repost other people's content (34%) most often.

"FO

THEY FEEL THEY CAN TELL WHEN FALSE INFORMATION IS POSTED ON APPS AND ONLINE

As warnings and accusations of "fake news" has become an everyday occurrence, Next Gen is more aware than ever of the information they receive and share. While currently our data shows that older is wiser, is Gen Z poised to quickly become the new trend in cyber-security?

Overall, almost all females (94%) claim they know how to tell the difference between factual and false information they see on apps and online ... 52% the majority of the time, and 43% some of the time. Young Zs are less likely (37%) than 18-24s (56%) to feel they can tell the difference the majority of the time. Female Millennial Snapchat daily users are more likely (63%) to tell if something is factual or false the majority of the time than their Gen Z daily Snapchat user counterparts (47%).

Similarly, most males (95%) claim they can spot false information on apps and online, 60% the majority of the time, and 35% some of the time. And, the younger Z males are somewhat less likely (50%) to tell the difference the majority of the time than 18-24s (58%) and 25-34s (65%). Male Snapchat daily users are more likely (72%) than non-daily users (55%) to say they can tell the difference the majority of the time.



AND, THEY MAKE SURE THE INFORMATION THEY SHARE ON APPS IS FACTUAL

So that they don't contribute to false information on apps, the majority of females (88%) say they check or verify the information they post or repost on apps to make sure it is factual. While more than half of Millennials (56%) check the content first the majority of the time, slightly less than half (45%) of Zs check it most of the time. Millennial Snapchat daily users (64%) are more likely than their Gen Z counterparts (46%) to check or verify information most of the time

Most males (93%) also check/verify the information before they post or repost it on apps, with 53% of Zs and two-thirds (67%) of Millennials claiming to check it the majority of the time.

FO

NEXT GEN TAKES ACTION WHEN THEY SEE FALSE INFORMATION IN APPS AND ONLINE

Steeped in a "call-it-out" way of life, it's not surprising that Gen Z and Millennials are working to limit false information online by unfollowing, dropping the truth, or reporting it to the platform.

When they see false information on apps and online, 76% of females will do something about it, including stop following the account/source of the false information (49%), adding a comment about the information being false (27%), and reporting it (29%).

The majority of males (82%) also do something when they see false information on apps and online, with 52% who stop following the account/source, 36% adding a comment that the information is fake, and 33% reporting it.





NEXT GEN PREFERS TO SEE CONTENT ON APPS THAT MAKES THEM LAUGH

With a real Next Gen mental health crisis largely due to their boundless access to the world's scariest information, it's no wonder Gen Z and Millennials are seeking to balance the harsh realities of the world and their endless activism with humor. Laughter is the new survival mechanism.

When using communication, camera and social apps, females tend to gravitate towards content that makes them laugh (66%); this is particularly true for 13-17 year olds (74%), and Gen Z and Millennial Snapchat daily users (73%). Their other preferred types of content include things that make them feel connected to their friends, family and/or community (43%), that educate them (40%), that make them think (33%), and that move them emotionally (26%).

Males' preference is also content that makes them laugh (59% overall, and 72% among 13-17 year olds). In addition, they prefer content that educates them (42%), that makes them think (38%), and that moves them emotionally (19%). Male Snapchat daily users are more likely than non-daily users to prefer things that make them feel connected (48%), that move them emotionally (28%), and that change their mind (24%).

FO

NEXT GEN IS INTO FUNNY CONTENT ON APPS AND ONLINE

Next Gen is bringing the funny to the web. Not only do Gen Z and Millennials respond to humorous content, they overwhelmingly and actively seek it out and share it.

When it comes to funny content on apps and online, most females seek it out (86%), share it (82%), and/or receive it (85%). Snapchat daily users are more likely than non-daily users to seek it out (89%), share it (87%), and receive it (90%). Memes and/or cartoons, and videos are their most typical funny content, followed by quotes.

Males also gravitate towards funny content, with 89% seeking it out, 87% sharing it, and 90% receiving it. Male Snapchat daily users tend to be more likely than non-daily users to seek it out (97%), share it (93%), and receive it (96%). As with their female counterparts, their preferred types of funny content are memes and/or cartoons, and videos, followed by quotes.



THEY BELIEVE THAT COMMUNICATING WITH HUMOR IS A VERY IMPORTANT TOOL FOR HELPING OTHERS

Females feel humor is an important tool when communicating with friends and followers on communication, camera, and social apps because humor and laughter are important, especially during difficult times (41%), humor helps relieve stress (40%), we all need to laugh (40%), and humor creates positive feelings (33%). Interestingly, more than half of 13-17 year olds use humor because we all need to laugh (54%, compared to 33% among 18-24s, and 38% among 25-34s).

Males primary reasons for using humor when communicating with friends and followers on communicative, camera, and social apps include humor helps relieve stress (35%), humor creates positive feelings (33%), we all need to laugh (32%), and humor and laughter are important, especially during difficult times (31%). Almost half of males 13-17 use humor when communicating because they feel humor creates positive feelings (48%, compared to 28% among 18-24s, and 29% among 25-34s),





NEXT GEN USES APPS TO CONNECT WITH PEOPLE WHO ARE DIFFERENT FROM THEM

In an era of extreme divisiveness, many are looking to Gen Z and Millennials to build bridges to those who look or believe differently than they do. While it's a tall order indeed, next gen seems to be gravitating towards others to expand their own knowledge base.

The majority of Gen Z and Millennial females (61%) seek out content from people who look and/or believe differently than they do. Younger Zs (13-17) are less likely (49%) to do so than their older counterparts (66% of 18-24s and 64% of 25-34s).

Most males (69%) also tend to seek out content from those who are different from them. This is particularly true of 18-24s (78%), compared to 60% of 13-17s, and 68% of 25-34s.



NEXT GEN APPRECIATES DIVERSE ONLINE CREATORS AND CONTENT AS A MEANS TO BROADEN THEIR MINDS AND VIEWPOINTS

There are many reasons why Gen Z and Millennials currently seek out, or would consider seeking out, online creators or content who represent diverse groups or tell stories highlighting diversity. Females seek learning (40%), interest in understanding others' differences (35%), the importance of seeing all sides of an issue (35%), and being able to expand the way they see and think about issues (32%) as their main objectives. Snapchat daily users are more likely than non-daily users to seek out diverse creators and content to open their eyes to systemic injustices (29%), to become a better ally (28%), and because the subject matter is open for discussion without prejudice (23%).

Among males, learning (37%) is also the biggest reason for seeking out diverse creators and content. Others include being able to expand the way they see and think about issues (30%), interest in understanding others' differences (26%), seeing all sides of an issue (25%), and getting the opportunity to engage with people they probably will never meet in person (25%). Male Snapchat daily users are more likely than non-daily users to gravitate towards diverse creators and content because they're a reflection of people you meet in real life (37%).



APPS AND SOCIAL PLATFORMS OPEN NEXT GEN TO NEW ISSUES, CONTENT, AND CULTURES

In the past few months, 51% of females have shared content on apps and social platforms, either about things they believe in (38%) and/or about social issues (32%). In addition, they became of aware of social issues they didn't know about beforehand (35%), consumed different types of content than they usually watch, read, or look at (34%), encouraged friends and people they know to do things to better the world (31%), and learned about new or different cultures (28%). Female Snapchat daily users are more likely than non-daily users to share content about social issues (38%), become aware of social issues they didn't know beforehand (39%), encourage people they know to help better the world (40%), and learn about new or different cultures (33%).

Similarly, 42% of males have shared content on apps and social platforms in the past few months, 31% about things they believe in, and 22% about social issues. Furthermore, 34% became aware of social issues they didn't know about beforehand, 31% consumed different types of content than they usually watch, read, or look at, 28% encouraged friends and people they know to do things to better the world, and 26% learned about new or different cultures. Male Snapchat daily users are more likely than non-daily users to share content about social issues (33%), become aware of social issue they didn't know before (41%), and learn about new and different cultures (33%).





MEMBERSHIP IN ONLINE COMMUNITIES IS MOST APPRECIATED FOR ITS ENTERTAINMENT VALUE, AND AS A PLACE TO JOIN THEIR FRIENDS

In our digitally-dominant lives, online communities are a billion-dollar business, and even more so since we were thrust into a virtual world with the start of COVID-19. For Next Gen, these communities represent the borderless ways they move about the world, creating bonds with people from all walks of life.

Females become members of <u>online</u> communities for entertainment (36%), because their friends are members (30%), for education (25%), to connect with other members (24%), and for a sense of belonging (23%). Younger female Zs, aged 13-17, are particularly interested in online communities because their friends are members (46%) and for entertainment (41%). For Female Snapchat daily users, online communities are particularly valued for entertainment (41%) and because their friends are members (36%).

Males' motivation for membership in <u>online</u> communities is for entertainment (34%), because their friends are members (28%), to connect with other members (21%), and to help others (21%). Similar to their female counterparts, younger male Zs join online communities primarily because their friends are members (56%), and for entertainment (52%). Male Snapchat daily users are more likely than non-daily users to join online communities to help others (27%), and because of the agenda, content, and information shared (26%).



SIMILARLY, MEMBERSHIP IN IN-PERSON COMMUNITIES IS ALSO VALUED FOR ITS ENTERTAINMENT VALUE, AND AS A PLACE TO JOIN THEIR FRIENDS

While new online communities are continuously popping up, Gen Z and Millennials also crave in-person connection. As younger Gen Zs are still coming into their own, their friends are still a big driver for what communities they participate in.

When it comes to <u>in-person</u> communities, females primarily join for entertainment (29%), because their friends are members (28%), and to have a sense of belonging (27%). Joining in-person because their friends are members is a big incentive for 13-17 year old females (45%). Snapchat daily users are more likely than non-daily users to join these communities for entertainment (33%), because their friends are members (33%), for a sense of belonging (33%), for the opportunity to make new friends (24%), and for the bond they can create (23%).

Males become members in <u>in-person</u> communities for entertainment (32%), for a shared common goal (28%), and because their friends are members (26%). Younger male Zs join in-person communities primarily because their friends are members (46%), and for entertainment (40%). Male daily Snapchat users are more likely than non-daily users to join for the shared common goal (34%), education (29%), and to connect with other members (23%).



NEXT GEN DOES NOT THINK IT IS VERY IMPORTANT FOR THE COMMUNITY THEY MOST ASSOCIATE WITH TO BE DIVERSE OR INCLUSIVE

Even with the outcry for racial justice and inclusivity, older Gen Z is still struggling to prioritize diverse and inclusive communities. Perhaps it feels safer in the college years to find those that look and think similarly - there's only so much change they can handle at one time - and it will be interesting to see how the younger Gen Zs behind them feel in another few years.

Less than half (44%) of females overall think it is important for the community they most associate with to be diverse and inclusive. 13-17 year olds think it's more important (53%) than their 18-24 (38%) and 25-34 (43%) counterparts. When they do look for diversity in that community, it's primarily different perspectives and beliefs. 18-24 year olds, however, also look for racial/ethnic diversity.

Overall, 40% of males think it is important for the community they most associate with to be diverse and inclusive. Younger and older males are more likely to think diversity and inclusivity is important (13-17= 48%, 25-34= 44%) than do 18-24 year olds (26%). Similar to their female counterparts, males also look for different perspectives and belief in their community.



HOWEVER, THEY WILL DISTANCE THEMSELVES FROM A COMMUNITY IF THEY DON'T AGREE WITH THE COMMUNITY'S VIEWS ON RACIAL JUSTICE

Since the resurgence of the racial justice movement over the last year, we have seen Gen Z and Millennials take a stronger stance against those who do fall in line with their beliefs (regardless of what those beliefs are). It will be interesting to see if and how some of these divides will ever be unified as people find common ground.

In the past year, 44% of females and 47% of males have stopped associating with or distanced themselves from a community due to the members' views on racial justice. This is particularly true of 18-24 year old females (61%) and males (58%).

Online communities and relationships are more diverse than their in-person communities and relationships for two-thirds of females (65%) and 57% of males.





FEMALES WOULD RATHER HAVE FRIENDS WHOSE APPEARANCE AND BELIEFS ARE MOSTLY DIFFERENT FROM THEM, WHILE MALES GRAVITATE TO PEOPLE MOST LIKE THEM

When it comes to who Gen Z and Millennials choose to be friends with, it is a battle of the sexes. However, in our divisive political climate, both females and males strongly gravitate to those who are on their same political team.

When selecting whether they prefer their friends to be like them or different from them, females want to have friends who do not look like them (65%), have a different religion from them (53%), have different cultural beliefs than them (52%), and have the same political views as them (67%). The youngest Gen Z females, however, prefer to have friends who share the same cultural beliefs as they do (55%).

Males, on the other hand, prefer to have friends who: look like them (57%), have the same religion as them (59%), share the same cultural beliefs as them (59%), and have the same political views as them (66%). Male Snapchat non-daily users are more likely than daily users to rather have friends of their same religion (62%).



GEN Z AND MILLENNIALS ARE DRAWN TO FRIENDS WHO ARE SUPPORTIVE, FUNNY, LOYAL, HONEST, KIND, LOVING, AND SMART

Being digital natives hasn't completely altered the way Gen Z forms friendships - at least not yet - meeting their closest friends IRL rather than IVL.

Not surprisingly, the majority of 13-34 year old males and females (84% for each gender) first met their very closest friends in person.

The characteristics that draw females to their friends with whom they have the closest relationships include supportive (37%), funny (36%), loyal (33%), honest (31%), kind (25%), and loving (23%).

The characteristics that draw males to their friends with whom they have the closest relationships include funny (37%), honest (35%), supportive (31%), loyal (26%), smart (23%), and kind (22%). Male Snapchat daily users are more likely than non-daily users to be drawn to their closest friends because they're funny (45%) and loyal (36%); non-daily users, however, are more drawn to close friends because they are smart (26%) as opposed to daily users (16%).

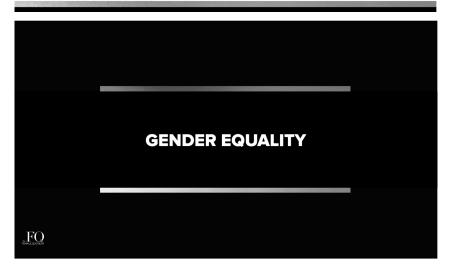


GEN Z AND MILLENNIALS WILL END OR DISTANCE THEMSELVES FROM FRIENDSHIPS IF THEY DON'T AGREE ON RACIAL JUSTICE

They say that breaking up is hard to do... but seemingly not as hard during a racial justice movement as divided points of view have signaled the end of friendships.

Similar to their reactions within communities, females (41%) and males (43%) have ended or distanced themselves from friendships due to differing views on racial justice in the past year. This is particularly true of 18-24 year old females (57%) and males (58%), as well as male Snapchat daily users (55%).

FO



EQUAL VALUE/WORTH AND EQUAL OPPORTUNITY ARE THE MOST IMPORTANT AREAS OF GENDER EQUALITY AMONG GEN Z AND MILLENNIALS

While the wage gap still looms across industries, today's young women are not prioritizing equal pay. Maybe they believe they are or will be the exception. Or perhaps they are less concerned with pay and more concerned with other Gen Z and Millennial priorities such as mental health and sustainability. Whatever it is, as that gap continues and leads to a million dollars in missed wages overtime, we're left to wonder if priorities will shift down the line.

When asked to select the one aspect of gender equality that matters most to them, females choose equal value/worth (32%), followed by equal opportunity (30%), equal pay (14%) and equal responsibility (14%).

Among males, equality opportunity (30%) is their first choice, with equal value/worth (27%) a close second, followed by equal responsibility (21%), and equal pay 15%). Male Snapchat non-daily users are more likely to say equal opportunity matters more to them (33%) than daily users, while daily users are more likely to feel equal value/worth matters more (39%) than non-daily users.

FEMALES AND MALES ALIKE EXPRESS THEIR SUPPORT FOR GENDER EQUALITY

A bright spot for the future of gender equality is that Gen Z and Millennial women and men seem to be in it together where it matters!

Females and males express their support for gender equality by celebrating others' achievements (42% each among gender), helping women reach their goals and be their best (41% among females, 38% among males), and advocating for women's rights and empowerment (41% among females, 35% among males).

175

DOCUMENT 10

Ω

Emotions associated with Snapchat

No Pressure
Happy Joy
Safe
Silly
Laughter
Real Relaxed

Real Relaxed Authentic

8

Pre-Work/Brand Deep Dive Snapchat is...

Authentic

Clear understanding that Snapchat is where you can be your 'true self'. be authentic, judgement-free

Snaps disappearing within 24 hours is very important in driving the perception of authenticity and being your 'true self'

Snapchat is associated with privacy and safety because of the ephameral nature and consumers have a smaller, more curated group of friends. Consumers can the found on the platform unclease they provide their username.

Communication

Snapchat is their main form of communication with friends.





6 36 8

Quotable Moments: Real



"You don't have to look made up.
You don't have to pose. It can be 2
in the morning and you're a mess
but these are your friends and they
won't judge you or hold it against
you."



"It's such a positive environment. You can be funny and creative and express yourself without worrying about looking right or getting likes."



"Snapchat is more purposeful. You have to specifically add someone. It's not just open. I keep it to just my friends that I hang with every day."

0

Quotable Moments: Communication



"Snapchat is much easier to use than texting. I don't really text. That's what my parents do."



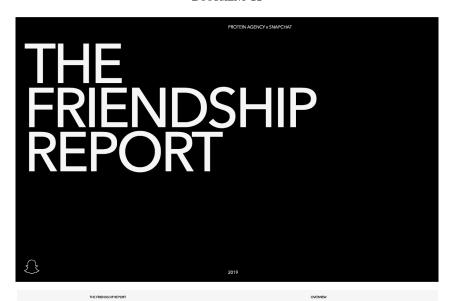
"If I'm just talking with friends, I use Snapchat. It's more private and easier to make plans without the world seeing what you're up to."



"I dated my boyfriend for a month and just realized two weeks ago I didn't have his actual phone number because we just talk on Snapchat!"

*

DOCUMENT 11



Snapchat was founded in 2011 on the belief that talking with photos and videos, with our real friends, was more personal and more fun than texting or keeping up on social media. Since then, the company has been evolving the platform but never deviating from this core mission of helping close friends express themselves and be creative together.

With the goal of really understanding what friendship is all about, all around the world, Snap undertook a massive global study around friendship.

We engaged 10,000 nationally representative people aged 13-75 in Australia, France, Germany, India, Malaysia, Saudi Arabia, the UAE, the UK, and the US, broken down into the four main generation groups— 0 BOOMERS GEN X 55 40 GEN Z: BORN 1996-2006 (AGED 13-23) MILLENNIALS: BORN 1979-1995 (AGED 24-39) GEN X: BORN 1955-1979 (AGED 40-54) BOOMERS: BORN 1944-1964 (AGED 55-75) 54 Years Old 75 Years Old We asked them questions about friendship including how many friends they have, how and where they meet their circle of friends, what qualities they look for in a best friend, what topics they do and don't talk about with their friends, how they communicate with each other, how they resolve fights, and what they want to *change* about their friendships. MILLENNIALS GEN Z 13 24 39 Years Old 23 Years Old Ten experts on friendship from around the world helped our team to contextualize the data, giving reasons for the findings we unearthed and explained the differences and similarities between generations and cultures. 0 AVERAGE AGE WHEN MOST PEOPLE MEET THEIR BEST FRIEND: AVERAGE NUMBER OF BEST FRIENDS AROUND THE WORLD 4.3 AVERAGE NUMBER OF GOOD FRIENDS THE MOST IMPORTANT QUALITIES WE SEEK OUT IN OUR BESTIES: Honesty + authenticity 7.2 AVERAGE NUMBER OF ACQUAINTANCES THE LEAST IMPORTANT QUALITY WE SEEK OUT IN OUR BESTIES: 20.4 Having a large social network

CHEMANN

0

We learned that Gen Z is adjusting their approach to friendship away from the Millennial desire for widespread networks and are looking for more closeness and intimacy with a smaller group, that love plays a stronger role in platonic relationships than we ever knew before, and that communicating with emojis, pictures, and videos can bring more clarity than text.

Above all, we came away with a powerful image of what friendship looks like today and an understanding of just how and why it's more important and valued than ever.

EXPERTS

GERMANY US Bill Rawlins Professor of Interpersonal Communication at Ohio University 0 Wolfgang Kruger
Psychotherapist and author of The Difficult
Luck of Friendship GEN Z & MILLENNIAL Amit Desai
Co-author of The Ways of Friendship
and lecturer in anthropology at the
London School of Economics Dana Kerford
Author of The Friendship Project and teacher specializing in youth friendship GEN Z & MILLENNIAL Lillian Ahenkan
Gen Z expert on millennials and happiness SAUDI ARABIA / UAE Roudha al Marri Co-author of UAE 101: Stories and Cultural Learnings GEN Z Chloe Combi
Journalist and author of Generation Z:
Their Voices, Their Lives Professor Thomas Dixon Presenter of the BBC's 500 Years of Friendship UK **Kate Leaver** Journalist and author of *The Friendship Cure* US
Miriam Kirmayer
Therapist and Ph.D. candidate in clinical psychology specializing in interpersonal relationships



1

FRIENDSHIP AROUND THE WORLD

THE FRIENDSHIP REPOR

THE AGE PARADOX-

Gen Z have more in common with Boomers from other cultures than they do with their own grandparents FRIENDSHIP AROUND THE WORLE

Our study of nine regions affirms that friendship is deeply valued in every country and generation. Our findings also revealed country-specific nuances regarding how many friends people have, how many they want, and what type of friendships they need.

According to Amit Desai, a lecturer in anthropology at the London School of Economics and coauthor of *The Ways of Friendship*, a book on the importance of friendship around the world,

"Everyone in the world wants friendship but what does that look like in practice? That can be highly culturally specific."

2019

Some cultures value a wider friendship circle than others which may be down to a different interpretation of friendship. In India, the Middle East, and Southeast Asia. people report having three times the number of best friends than those in Australia, Europe, and the U.S. Saudi Arabie has the highest average number of best friends at 6.6, whereas the U.K. has the lowest at 2.6. While the U.S does not have the lowest number of best friend.

Those in India, the Middle East, and Southeast Asia are four times more likely to want a friend who "reflects the preson lassing to the Very East and Southeast Asia are four times more likely and benefit of what I have seen is non-judgemental when their friends are often reflections of themselves. It also explains with year by two or the best friends, and they are twice as likely to want a friend who "reflects the propel similar to yourself."

Amit notes that in many Asian countries.

Those in India, the Middle East, and Southeast Asia, were two the solvent free best friend.

Those in India, the Middle East, and Southeast Asia are four times more likely than other regions to say that a large social network' is an essential quality to have in a best friend, and they are twice as likely to want a friend who "reflects the person I aspire to be." Being "intelligent and cultured" is more valued by those in India, the Middle East, and Southeast Asia, whereas being "non-judgemental" matters are the person I aspire to be." Being "intelligent and cultured" is more valued by those in India, the Middle East, and Southeast Asia, whereas being "non-judgemental" matters are the person I aspire to be." Being "intelligent and cultured" is more valued by those in India, the Middle East, and Southeast Asia, whereas being "non-judgementa." are often reflections of them—explains why they may have only two or three best friends, as it is hard to find people similar to yourself.

Amit notes that in many Asian countries, including India, friendship is focused on an understanding that a relationship can rely on exchange as well as equality. I do this for you, so you do this for me." Therefore it makes sense to have a network of best friends who may serve different purposes, and to find new friends that bring a variety of complementary qualities to your life.

0 1

2

AVERAGE NUMBER OF BEST FRIENDS PER COUNTRY:

SAUDI ARABIA 6.6 6.4 000000 MALAYSIA 000004 5.8 FRANCE 0004 3.6 AUSTRALIA

001

0001 GERMANY 000(000(UK

3.3

3.2



We see that when it comes to the platforms the generations look to for help in diversifying their social circle. Boomers overwhelmingly choose Linkedin and are ten times more likely than Gen Z to pick that platform. Millennials and Gen X choose WhatsApp, while Gen Z looks to a spread of WhatsApp, instancy, and Snapchat, and is the most likely of all four generations to turn to Snapchat to open up to make their circle more inclusive.

"On the one hand, learning that you share something meaningful with someone from a completely different background can be an incredible catalyst for connection. On the flip side, there is an increased recognition of the value of befriending someone who is not like us; this difference might be the shared value that brings people together-fulfilling their desire for new experiences, knowledge, and personal growth."

-MIRIAM KIRMAYER

Surprisingly, different age groups from separate cultures frequently have more in common than might be expected.

In India, Boomers are the generation most likely to want their friendship group to be more diverse in terms of age, gender, race or sexuality (32%), while Gen Z is the least likely (23%). In the U.S, we found the opposite, with Gen Z wanting more diverse friendships (24%) than Boomers (12%). Gen Z from both countries align in their desire for diversity, but Gen Z in the US are closer in attitude to the Boomers in their own country-sak their grandparents! In another example, Boomers in Saudi Arabis have more in common with Gen Z in Australia, as both groups are highest in their respective countries for putting best friends first (50%), and wanting to expand their social circles.

Our US expert, Miriam Kirmayer, is a therapist and Ph.D. candidate in clinical psychology specializing in interpersonal relationships. She argues that the benefit of embracing a more diverse friendship group is two-fold.

11

Globally, 88% of people enjoy talking to their friends online. Our respondents were able to select multiple options to explain what they enjoy about online communication, and there is an agreement about the benefits. Across all regions, 32% of people chose the ability to "talk to their friends faster and more easily" as their favored explanation for why online works so well for them, and over 25% of people also like that it allows them to multitask.

them to multitask.

Gen Z and Millennials are unsurprisingly emphatic in their love for talking with friends online—only 7% and 6% respectively said they don't enjoy it, compared with 13% of Gen X and 26% of Boomers. Only 23% of people in Saudi Arabia and 26% of people in the US chose being "able to talk to their friends more often than they would otherwise" as a reason for talking to friends online, compared with 37% of people in France and Malaysis. People in India, the Middle East, and Southeast Asia are twice as likely at 30% to say that talking online alloit, the Middle East, and Southeast Asia are twice as likely at 30% to say that talking online alloit, the Middle East, and Southeast Asia are twice as likely at 30% to say that talking online alloing "more playful and funny" than people in Australia, Europe, and the US at 15%. Boomers are less interested in being "more playful and funny" as only 10% chose this option, compared to 26% of Gen 2 and Millennials.

Bombay, India based photographer Anurag Banerjee spent time with pairs of friends spanning each generation—Gen Z, Millennials, Gen X, and Boomers—to explore what friendship means to them, how it's expressed and the spaces it occupies around the city.







THE FRIENDSHIP REPO







LENNIALS & GEN Z: SAME SAME BUT VERY DIFFEREN



THE GENDER (NON)GAP-

Friendships still adhere to some traditional gender norms, but the dynamics are shifting globally FRIENDSHIP AROUND

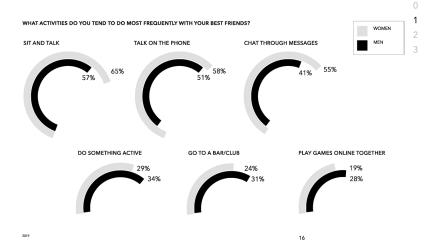
From pop culture to parenting books, it's been ingrained in many of us that male and female friend relationships look very different. We wanted to explore that.

Of our 10,000 respondents, 64 identified their gender as non-binary, with the remaining number split equally between males and females. Our numbers reflect one or two of the more hetronormative and stereotypical takes on "male" and "female" friendship. Kate Leaver, journalist and author of *The Friendship Cure*, summarizes these stereotypes as the idea that women are traditionally happy to sit in each other's company and talk with no outside stimulus, whereas the traditional male friendship requires an external focus to which they can both respond.

2019

THE FRIENDSHIP REPORT

ERENDSHIP ARCHIND THE WORLD



The gap between these numbers isn't huge and shows a crossover in what men and women find enjoyable. 'We tend to think of women's friendships as being much more intimate than men's," Miriam explains," and there are certainly some meaningful differences. However, as is often the case, the similarities within groups often exceed any differences between them. One of the shifts we are seeing is that men are becoming more aware of, and comfortable with, their need for social connection and intimacy within their friendships. In many cases, it is also increasingly common for men to seek out emotional and physical closeness in their platonic friendships." Bill Rawlins, Professor of Interpersonal Communication at Ohio University, describes an overall shift in how we perceive the differences between male and female friendship due to increasing gender fluidity.

The US is the country with the highest number of people stating that their best friend is someone of the opposite sex to them, with India coming in a close second. Roughly 33% of our respondents in both the US and India align themselves to that

Amit Desai has researched friendship in India extensively, and gives country-specific context for these findings: "If you want to understand why there is such a high number of people in India saying their best friend is of the opposite sex, you need to understand that friendship does not exist in a vacuum... In this instance, this 'opposite sex' friendship is growing in India, and it has come about because romantic relationships have changed."

"Gender differences have been so significant when looking at friendship, and still give us some important clues, but gender expectations are getting more and more fluid, which is changing the dynamics of friendship between genders."

-BILL RAWLINS



We have two things, men can now conceive of a woman being their best friend and vice versa, which did not happen before, and we now have friendship groups of men and women mixing, going out, and dating where previously they were segregated. This new type of friendship is being captured and reflected on TV and in the movies, and so people in rural India are being confronted with seeing new ways to behave as friends by watching on screen. And they are learning that it's not shameful for a man to be friends with a woman-the boundaries are blurring."

-AMIT DESAI

Marriages in urban India have traditionally been arranged by parents, or by a man expressing interest in a woman and then asking parents to arrange it. But there has been a significant shift towards young people seeing marriage in romantic terms that include dating, falling in love, and having a spouse that is also your friend.

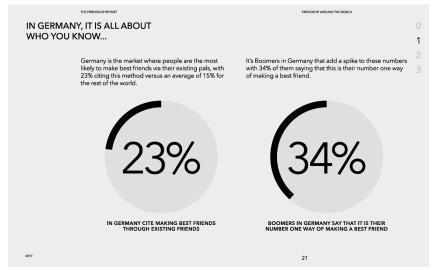
having a spouse that is also your friend.

In Saudi Arabia, just 18% of respondents say their best friend is of the opposite sex-the lowest number of all our countries. According to Roudha al Marri, who co-authored a guide on the nuances of Saudi friendship, it is relatively natural and ingrained in Saudi society for men and women to physically separate themselves from one another. This segregation is gradually becoming less common in the workplace, at school, and at university, and the rise of social media and messaging apps and being online is breaking the barriers down further. The ability to communicate without being in the same physical space has improved communication between genders. Men and women can develop friendships in a way that has not been possible before and is still hard to do face to face."

1



FOR THE REST OF THE WORLD



2



THE IMPORTANCE OF FRIENDSHIP AND COMMUNICATION

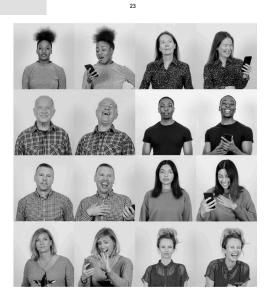
FRIENDS, THE FAMILY

Younger generations are increasingly relying on friendships for happiness and love

However they come about, and whatever form they take around the world, friendships are entirely different from our relationships with our colleagues, our families, and our partners. According to Miriam Kirmayer, "The big thing that differentiates friendships from other relationships is the fact that they're voluntary."

She explains that, "Unlike our relationships with our family, partners, and children, there is not the outright expectation with our friends that we have to stay involved in each other's lives. We continuously need to choose to invest in our friendships, to remain involved in each other's lives—to show up. It's an ongoing implicit choice that makes our friendships so hugely impactful for our sense of happiness and our self-esteem. This is because we see that our friends are showing up and that they're invested in our lives, even though they don't have to be." The voluntary nature of our friendships is what makes them so important to us. friendships is what makes them so important to us.

LIFT ME UP



UK photographer Antonio Olmos captures a series of portraits of subjects before and after speaking to their friends.



Our data shows that interacting with friends, whether in person or online, leaves us feeling overwhelmingly positive emotions: "happy", "loved", and "supported" are the three most reported. Interesting differences emerge when we look at the generational breakdown of our data. Boomers come away happiest from interacting with friends online. They share the top spot for reporting "happy" as the most common emotion they experience, along with Millennials at 40%.

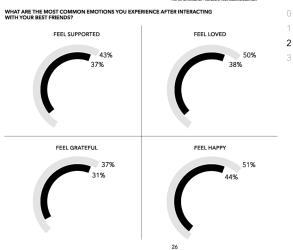
"Friendships have become more important during the past 30 years," says Wolfgang Kruger, a German psychotherapist and author of The Officult Luck of Friendship. 'Family ties are loosening more and more, and we seek support from friends rather than parents, siblings, and other relatives." All four generations reported feeling supported through their interactions with friends both online and offline. It's clear that while friendships make Boomers feel apply and supported, they don't feel as loved as younger generations do. Only 33% of Boomers feel "loved" after being with friends IRL compared to nearly 50% of Millennials and 45% of Gen Z While 33% of Millennials and Gen Z feel loved after interacting with friends number of the support of the suppor "Friendships have become more

2

29% of Gen X feel the same, only 18% of 6 Boomers experience that deeper emotion from an online interaction. Boomers experience the least negative emotion-only 3% report feeling overwhelmed, contrasted with 8% of Millennials. Only 2% of Boomers felt anxious after hanging out with friends online, compared with 7% of Gen Z.

Kate Laver says she's not surprised that younger generations report strong feelings from interacting online, as it is a crucial space for finding and nurturing friendships. "I spoke to people who found and made their most important friends online. I met someone who met all three of their bridesmaids online. She found that being online was a way for her to open up and grow these amazing relationships via DM." She thinks that, "Boomers are less dependent on being online, and their usage is shallower and a little more detached, in a way which is unimaginable for Millennials and Z."

We also discovered that men and women felt similar emotions from hanging out with friends online. Men were slightly more likely to feel validated and inspired than women. But when looking at how they felt after interacting in person, women clocked higher percentages on the feels scale:



WOMEN MEN

E FRIENDELIR RESCRE

A FRIEND IN NEED-

Friendship is a kind of therapy, but a few strong friendships are better than many weak ones

2

2

Both our data and our experts are emphatic about the importance of friendship. According to Bill Rawlins, "Friendship is a source of joy, Friendshave fun." The other side of friendship is the more profound aspect that involves getting to know someone and being with them through thick and thin.

Professor Thomas Dixon puts it this way:
"Friendship means being able to share secret
things with someone you can completely trust. It's
about providing a kind of therapy and getting the
same in return."

2019

THE FRIENDSHIP REPOR

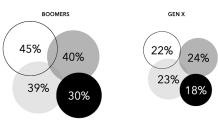
Nearly half of our respondents said that one of the most important qualities to have in a best friend is that they can provide emotional support during times when I am feeling down." Although this matters nearly equally to Boomers as it does to the other generations, Boomers are extremely buttoned up when it comes to the types of things they would or wouldn't talk about with their bestie:"



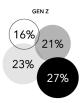
7
Provide emotional support during times when I am feeling down as the most important quality to have in a best friend:
Gen Z: 47%
Gen Y: 46%

THE IMPORTANCE OF FRIENDSHIP AN

"WOULD $\underline{\text{NOT}}$ SHARE THIS TOPIC WITH MY BEST FRIEND"



12% 17% 15% 11%





Wolfgang Kruger tells us that, "Sharing gives us the feeling of being deeply understood and therefore not being alone, this is vital as loneliness of one of the main reasons for psychological problems." He believes that friendship can be an answer to loneliness in a way that doesn't limit or restrict us in the way families and partnerships can. So why are Boomers less villing to share the intimate details of their lives with their friends?

details or their Irves with their Irrenos?

According to Amit Desai, the answer might be in the social role that romantic partnerships have conventionally played for the Boomer generation. In the UK there was a 'nuclear family' mentality which would pervade amongst Boomers and the remaining Silent Generation before them. Your household was a self-contained society with a husband and wife that would share everything within that unit, and nothing of note was to be shared outside of it. Pleasantnes and the chat could be exchanged with friends, but nothing more meaningful or personal.

The stigma around unburdening yourself on someone else may also account for the Boomer generation's reluctance to share. Miriam Kirmayer explains that, "There is a feeling that talking about this kind of thing

ins the propriate and makes you a burden to your friend, and that you will drain them by talking about personal issues." She also points out that, "It may not even be a case of holding back, some people just don't see their friends as people to share this kind of information with-it doesn't even cross their minds." This may explain the Boomer generation's reticence to talk as openly with their friends. To younger generations who are used to more informality, sharing, and openness, this is likely to seem alien.

2

29

memeoseweour

Generational data aside, our work shows that one in ten people don't have a best friend at all. And of this unique group, one in five asy that they have no interest in having friends at all. Miriam Kirmayer believes that it is both disingenuous and concerning that these people say that they don't need friends. She says, "While we all differ in terms of our need for social connection, what matters more than the number of friends we have is our subjective experience of feeling supported. One of the things I see in my work as a therapital is how easy it can be to convince ourselves that we don't need something we feel is missing. It can be so difficult to sit with the discomfort, loneliness, and shame that comes with feeling like we don't have enough friends or social connections.

For some people, instead of tolerating this discomfort or using it as motivation to seek out new connections and strengthen existing ones, they react by putting up walls and convincing themselves that they don't need friends. This behavior can be dangerous because it invalidates our universal need for genuine human connection."

Wolfgang Kruger agrees, stating, "People who have very few or zero friends tend to suffer from anxiety, depression, and are sick more often. Long term studies have shown that their life span is decreased by 20%. These people are less happy because happiness is mainly based on the steady foundation of friendship." Trying to make as many friends as possible may not be the answer either, and it may even be prohibitive. We found that between the ages of 13-19 having six or more best friends can be just as isolating as having none. Those with six or more best friends felt less able to talk about their frustrations regarding their family and friends than those with zero best friends. Of those people with six or more best friends, 63% said that the number of best friends, compared with only 40% of people with one to three best friends.



20 TO LIFE

Our research shows that the average age people meet their best friend is 21. Photographer Suzanne Lee captured two friends in Malaysia who exemplify this.

Nishah (36) and Mei Mei (40) have been best friends since they were 19 and 22 respectively, and continue to be inseparable today. They first met in their classical dance school, and have both risen to become teachers at the school and perform together in international dance tours. Nishah is now married and has a son with special medical needs. Mei Mei provides emotional support through this, while their connection through dance remains a bedrock in their lives as friends.



NDSHIP REPORT



2















KEY VISUALS

Talking face-to-face is the best way to resolve conflict, but emojis, videos, and even photos can help reduce misunderstanding online

"By talking through conflict, you learn more about your friend, and trust and respect grows from the increased understanding of one another."

-DANA KERFORD



Dana Kerford, author of *The Friendship Project* and a teacher who specializes in helping kids and teenagers with their friendships, has found that her students have high expectations of their friendships. To reduce this pressure, she talks them through her four rules of friendship:

- No friendship is perfect
 Every friendship is different
 Trust and respect are the foundations of friendship
 Friendships change and that's ok

2

35

Having an understanding of these guidelines helps her students build stronger friendships based on forgiveness and flexibility. Dana believes that conflict and more specifically conflict resolutions the "secret sauce" to building a long-lasting or even life-long friendship.

Dana's teachings find a correlation with our study. Respondents cite dishonesty as the number one enemy of friendship.

Gen Z also cite some other fravations with their friendships. They often highlighted their annoyance at best friends when they seem to be more interested in other friends, and when best friends. They so many friends they don't give our relationship enough attention. "An These feelings decrease rapidly as the generations get older and are likely the outcome of that particular age group, as well as the nature of larger friend groups at school and college.

When it comes to conflict resolution, Gen X and Boomers are adament in ensuring that they resolve issues face-to-face, with 77% of Boomers choosing real-life facetime. ¹⁹ The majority of Gen Z and Millennials also choose this as their preferred method, but they are twice as likely as the older generations to prefer to, "resolve an issue over text or



social media so that I can think carefully about what I want to say and take the time to think through my responses."11

Dana encourages her students to use emojis to replace the missing body language and make sure that real feelings are understood. She explains, 'There is a study that demonstrated that 93% of what we communicate to the world is non-verbal. A big part of this is facial expressions and body language. The other part of it is the tone and the nuances in how you say things. So only 7% is left to the words we speak.' As a result, Dana believes that text-only messages can be misinterpreted and accidentally reinforce a conflict.

Miriam Kirmayer agrees that it's important to be thoughtful about how we resolve conflicts online, stating. When it come to avaigating important friendship challenges or experiences, in-person interaction is preferable. However, for a variety of reasons, that's not always possible. The trouble with online conversations is that a lot of subtlety gets lots, especially when it relates to emotion and intent. However, there's some fascinating research coming out showing that we can use emojis and

punctuation to our advantage to facilitate closeness, strengthen our message, and minimize misunderstandings. ¹² Emojis can convey emotions, nonverbal behaviors, and even a sense of collaboration or solidarity."

2

"It's about communicating with intent. It's about feeling connected in a meaningful way. It's not about frequency or necessarily medium, but about the feeling of being appreciated and seen for who we really are."

-MIRIAM KIRMAYER

Joups,

and the words. Explaining,

dium that allows us to share both verbal and non-verbal behavior, like video, can help us to feel closer and more connected and to navigate relationship challenges with darity.

Unsurprisingly, video and photos also help friends to express themselves when they don't share a native language. In India, the Middle East and Southeast Asia, 248 of people state that communicating through the camera reduces language barriers. We found that India, Malaysia, and the UAE were the regions least likely to say they grew up speaking the same language as all of their friends.

Regardless of language differences, an average of 56% of people from rountries love sending video recause it helps them to anyth words. I'm also be r

Regardless of language differences, an average of 56% of people from all countries love sending video and photos because it helps them to asy what they can't with words. Using video and photos can also be more efficient.





MILLENNIALS & GEN Z: SAME SAME BUT VERY **DIFFERENT**

THE END

How Gen Z are reclaiming their autonomy online via private sharing

3

Throughout the research, Millennials come out on top as the most share-happy of the generations. Millennials are the least likely to say "I wouldn't share that," and they have the highest likelihood to share every topic we listed. Millennials will share issues publicly via platforms like Instagram or Facebook more than any other generation, but this is a trend that Gen Z doesn't appear to be following. In fact, the numbers show that Gen Z is sharing less so we talked with some experts about what's behind this generational shift. ¹³

Global "Would not share this topic with my best friend"
Love life Boomers: 45% Gen X: 22% Millenelals: 12% Gen Z: 15%
Mental health Boomers: 37% Gen X: 24% Millenelals: 17% Gen Z: 21%
Money concerns
Boomers: 37% Gen X: 23% Millenelals: 17% Gen Z: 21%
Boomers: 37% Gen X: 23% Millenelals: 15% Gen Z: 23%
Relidionalty issues
Boomers: 30% Gen X: 18% Millenelals: 11% Gen Z: 27%

HE FRIENDSHIP REPORT

VILLENNIALS & GEN Z: SAME SAME BUT VERY DIFFERENT

Lillian Ahenkan, an Australian Gen Z and expert in millennials and happiness, explains, "I would think that while they might be sharing less, the bigger part of the story might be that they're just keeping it under wraps."

She finds that millennials make "dramatic".

She finds that millennials make, "dramatic performative announcements about "leaving social media" or quitting the internet, but Gen Z doesn't think about 'opting out' because it's all they've ever known. For Gen Z, social media and messaging apps are a legitimate extension of themselves."

3

Gen Z's familiarity with these platforms means that they carefully choose how and where they share. According to Lillian, "They are reclaiming their autonomy online via private sharing-that's where they're really raw and open with each other." And can you blame them? Gen Z has seen the full consequences of what can happen when you share your entire self online and people on the internet decide they don't like it.

Chloe Combi, journalist and author of Generation Z: Their Voices, Their Lives agrees, "Gen Z is much more careful and thoughtful about what they say. There is a fear of misstating something and being pounced on."

41



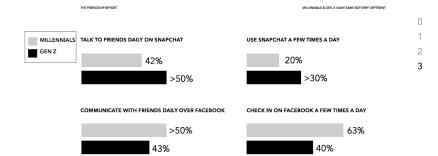
Gen Z is sharin

FROM PUBLIC TO PRIVATE-

Millennials prefer fast responding and networked friends, but Gen Z wants intimate friendships with fewer people MILLENNIALS & GEN Z: SAME SAME BUT VERY DIFFERENT

Gen Z is sharing less publicly than Millennials, and they are also forming friendships in different ways. Gen Z is looking to get closer to a smaller group of friends. Chloe Combi tells us, "What you have to understand is that millennials are the Facebook and MySpace generation. Their connection to the emergence of social media was with those platforms, and those platforms are all about networks. It was exhilarating for them to be able to spread out far and connect with this vast network of people via their immediate circle," and that by contrast, you can learn a lot about Gen Z by the apps they focus on, "If you think about Snapchat or TikTok, they're not about a vast network, they're more about you and what you want to focus on."

2019



Online communication platform choices can create differences between large friendship groups, and smaller deeper ones.

to the average number of types of friends, users of more public platforms tend to have larger groups of connections, but less true friends than those who prefer private communication platforms. Snapchat users have the highest number of 'best friends' and 'close friends', and the fewest number of 'acquaintances'; while Facebook users have the fewest number of 'best friends'; and Instagram users have the highest number of 'acquaintances.'14

Chloe believes that the difference in social five. More than that isn't practical. media and messaging apps use between $$\operatorname{Millennials}$$ and $\operatorname{Gen} Z$ is down to intimacy. Experiment in time and emotional energy." Millennials and Gen Z is down to intimacy. Gen Z is actively seeking intimacy in their friendships, and wants their relationships to be open and honest more than any other generation. Gen Z is closer to the older Gen X in wanting "a few deep relationships." In contrast, Millennials are more likely to want a best friend with replies quickly and has an extensive social network. Millennials are also more likely to want "as many friends as possible" than any other generation.

any other generation.

Lillian Ahenkan believes that Gen Z might be onto something and thinks that friendship comes down to a simple question: how much are you willing to give to the ones that really mean something to you? Sen notes that, "For the friends you genuinely love, you think 'how can I amplify them, how can I make their lives better?" And we can't do that for a lot of people. "Lillian's explanation relates to the famous "Dunbar Number." Robin Dunbar is an evolutionary psychologist who says that we do not have the cognitive capacity to socialize, bond with, and remember the past interactions of more than 150 people. Kate Leaver expands stating, "Dunbar says that the core group of intimate friends is about

Miriam Kirmayer agrees saying, "It's not possible to cultivate an endless number of meaningful friendships. To get close with someone you have to be vulnerable, and that takes its toll if too many people demand it. The larger a group gets, the greater the pressure to open up to people around you and invest in those relationships. We can burn out when the expectations from too many exponence of the property of t expectations from too many people get too high." It looks as though this is a life lesson that Gen Z has already learned.

14
Types of friends averages for
Snapchat, Instagram, and Facebook
(global as well for reference): 3



WE ARE LEGIT IN LOVE WITH OUR FRIENDS

GEN Y & Z COME AWAY FROM INTERACTING WITH FRIENDS FEELING 'LOVED'15

"There is a romantic element to the platonic friends; there can be a crush when you meet someone amazing, it's almost like falling in love."

-PROFESSOR THOMAS DIXON

MILLENNIALS & GEN Z: SAME SAME BUT VERY DIFFERENT

"Friendships amongst younger generations are intense and intimate, in some cases they seem to be replacing the traditional romantic relationships; you see they treat friends almost like a quasi-partner."

-CHLOE COMBI

"In a way, really healthy friendship looks a lot like a good marriage; you see someone for who they genuinely are, and you stand by them."

- LILLIAN AHENKAN

AND IT CAN BE LOVE AT FIRST SIGHT

GEN Z IS THE READIEST TO FALL FAST FOR A FRIEND. NEARLY



SAID THEY ONLY NEEDED A MONTH TO DECIDE IF SOMEONE WAS THEIR BEST FRIEND¹⁶

"We've all heard of love at first sight, but there is research by Kelly Campbell and colleagues to suggest that friendship at first sight (otherwise known as "friendship chemistry") is a real experience for some. An immediate connection or spark is often the result of shared interests, values, or experiences and personal characteristics like openness. There are few things as exciting as meeting someone new and leaving a conversation as fast friends. That said, I caution against getting too caught up in this narrative. Just because you don't experience immediate chemistry with someone new does not mean that you can't go on to experience a close, meaningful friendship. For most people, it takes time and repeated interactions to build the trust, understanding, and shared history that characterize close friendships."

-Miriam Kirmayer



HOWEVER WE LOVE OUR FRIENDS, OUR FRIENDSHIPS MAKE OUR ROMANTIC RELATIONSHIPS STRONGER



"First of all it is a fact that romantic relationships are much better if we also maintain good friendships. Lovers with good friendships are less dependent and don't develop too high expectations. They do not want to share every single thing in life, which always puts too much of a burden on a love relationship."

3

-WOLFGANG KRUGER

"Not only are friends vital because people are getting married later, so we need the support of our friends for longer, but friendships are crucial to the health of romantic relationships."

-MIRIAM KIRMAYER

47

201

DOCUMENT 12

10/29/21, 1:54 PM The Friendship Report



=

June 25, 2019 6/25/2019

The Friendship Report

A study conducted by Protein Agency and Snap Inc. exploring the impact of culture, age, and technology on friendship



Snapchat was founded on the belief that talking with photos and videos, with our real friends, was more personal and more fun than texting or keeping up on social media. Since then,we've been

10/29/21, 1:54 PM

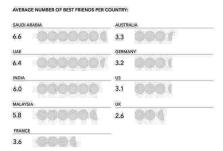
The Friendship Report

evolving the platform, but never straying from this core mission to help close friends express themselves and be creative together.

With the goal of really understanding what friendship is all about, all around the world, we undertook a massive global study around friendship. The Friendship Report, commissioned in partnership with Protein Agency, polled 10,000 nationally representative people ages 13 to 75 in Australia, France, Germany, India, Malaysia, Saudi Arabia, the UAE, the U.K. and the U.S.

Read on to see some key findings and download the full report

Across all markets surveyed, people's average social circle consists of 4.3 best friends, 7.2 good friends, and 20.4 acquaintances.



"Honesty" and "authenticity" are the most important qualities of a best friend and "having a large social network to tap into" is of least importance when making friends.

Culture impacts what we value in our friends too. Having friends who are "intelligent and cultured" is more valued by those in India, the

10/29/21, 1:54 PM

The Friendship Report

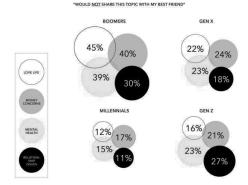
Middle East, and Southeast Asia, whereas being "non-judgmental" matters more to those in the U.S., Europe, and Australia.

When it comes to how people like to communicate and what they share, generation of course plays a role: **Globally, Gen Z and millennials are unsurprisingly emphatic in their love for talking with friends online**—only 7% and 6% respectively said they don't enjoy it, compared with 13% of Gen X and 26% of baby boomers.

Interacting with friends, whether in person or online, also leaves us feeling overwhelmingly positive emotions: "happy," "loved," and "supported" are the three most reported globally.

Of Gen Z and millennials, **61% believe that video and photos help them to express what they want to say** in a way that they can't with
words.

We also see that millennials globally come out on top as the most "share happy" of the generations. They're the least likely to say "I wouldn't share that" across all categories surveyed and are also more likely to want "as many friends as possible" than any other generation.



https://forbusiness.snapchat.com/blog/the-friendship-report

3/5

10/29/21, 1:54 PM

The Friendship Report

Gen Z doesn't appear to following in millennials' footprints

though, rather they are seeking intimacy in their friendships, and craving open and honest relationships more than any other generation.



The Friendship Report

Download the full report to learn more

Download

Question 3. At the time a new feature was rolled out by Snap in 2020, a representative of Snap, Inc. was quoted as saying, "sometimes people come in and search for this kind of content, be it anxiety or depression." ² Is Snap tracking how often people search for content related to teens' mental health on the app? If so,

please provide that data.

Answer. When any user searches for specific mental-health related terms like "depressed," "suicide," "anxiety", and "self care" they will be led to our mental health and body positivity portal, *Here For You*. In the past 30 days (from November 15, 2021) the *Here For You* portal was accessed a few thousand times. We minimize the collection and retention of data related to all search queries, and do not specifically conduct analysis on queries related to mental health.

Social Media and Eating Disorders. Studies have found that eating disorders have one of the highest mortality rates of any mental illness.³ Researchers have found a "clear pattern of association" between social media use on apps like Snapchat and disordered eating patterns in teens.4

Question 4. Are you aware of any research studies your company has conducted about how your app may push content promoting eating disorders to teens? If so, please provide those studies.

Answer. We have not conducted any research studies on this issue. The promotion and glorification of eating disorders is a violation of our Community Guidelines and we remove all content that we find that violates this rule. Because Discover, our closed content platform where Snapchatters get their news and entertainment, is curated and moderated, there is little opportunity for users to be exposed to harmful viral content, including content promoting eating disorders. If Snapchatters search for terms that suggest interest in eating disorder content, they are directed to *Here* For You, which delivers users with information about eating disorder signs and symptoms in partnership with organizations such as the National Eating Disorders Association.

Algorithms for Content Moderation. Frances Haugen disclosed that Facebook has been misleading the public about how well it can detect and remove harmful con-Facebook's internal documents estimated that their automated systems removed less than one percent of prohibited violent content."6

Question 5. Has Snap collected any data about how often Snap's automated content detection systems failed to capture content on Snapchat that violates the company's terms of service in the last 18 months? If so, please provide that data.

Answer. We have some data about the prevalence of content that has evaded automatic detection from the broadcast areas of our app. User-generated content that fails automatic moderation on our Spotlight and Discover platforms moves to a secondary phase of human moderation for further review. Approximately 0.09 percent of public user-generated stories on Discover are incorrectly auto-approved. For this 0.09 percent, Snap has teams around the world that review Snapchatter reports and take down such content.

We do not have data on our private content areas, but anyone can report inappropriate content for 24/7 review. We are constantly improving our ability to capture violating content by training our automation with our manual team's decisions. We also utilize technologies such as PhotoDNA and CSAI Match as described above that automatically detect known child sexual abuse material for investigation and referral to NCMEC and law enforcement.

Advertising and Teenagers. Snap earns revenue from advertising.

Question 1. Please provide copies of the 100 most popular ads, in terms of

viewership, among all users on your platform in the last year.

Answer. See attached spreadsheet ("Snap-Top 100 Most Popular Ads-Confidential") with links to the ads. Some do not have links because they are dynamic product ads and do not have a set ad but rather, are generated from a product catalog at the time of viewing.

 $^{^2\,}https://www.fastcompany.com/90461846/snapchat-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-for-mental-introduces-new-interventions-new-interventions-new-interventions-new-interventions-new-interventions-new-interventions-new-interventions-new-interventions-new-interventions-new-interventions-new-interventions-new-interventions-new-interventions-new-interventions-new-intervention-new$

 ^{*}https://anad.org/get-informed/about-eating-disorders/eating-disorders-statistics/
 *Wilksch, S. M., O'Shea, A., Ho, P., Byrne, S., & Wade, T. D. (2020). The relationship between social media use and disordered eating in young adolescents. International Journal of Eating Disorders, 53(1), 96-106.
 *https://www.wsj.com/articles/facebook-ai-enforce-rules-engineers-doubtful-artificial-intellicence/if24292916.

gence-11634338184

 $^{^6}https://www.wsj.com/articles/facebook-ai-enforce-rules-engineers-doubtful-artificial-intelli$ gence-11634338184

Question 2. Please also provide copies of the 100 most popular ads, in terms of

viewership, among teenagers on your platform in the last year.

Answer. See attached spreadsheet ("Snap—Top 100 Most Popular Ads—Confidential") with links to the ads. Some do not have links because they are dynamic product ads and do not have a set ad but rather, are generated from a product catalog at the time of viewing.

Question 3. Snap reported that its advertising revenue per user in North America for the second quarter of 2021 was \$7.37.7 How much of Snap's revenue in the second quarter of 2021 came from users under the age of 18?

Answer. We estimate that 13.3 percent of Q2 2021 North America revenue came from users between the ages of 13 and 17.

Children on Social Media. Snap states that it prohibits children under 13 from creating accounts on the Snapchat app.

Question. How many under 13 accounts has Snap removed in the last year?

Answer. In the past 365 days (as of November 15, 2021), we've deleted 2,568 accounts for being under 13. In the last 30 days, approximately 3 percent of devices that attempted to register for a Snapchat account failed registration due to being under 13.

ATTACHMENT Snap—Top 100 Most Popular Ads—Confidential

rank	ad—account—name	organization—name	download—link
1	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/7771c2fe- e3f5-4e8c-9a5e-0/8652da8339/2e18b0b5- d02a-40d5-a54a-67f734a0aba5.png
2	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/3aa0d6e3- 7dd5-4e56-9a29-6cc8e7fdac43/0827a4bf- d1d3-4b82-af1d-93de7d09ea09.png
3	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/1b5d719b- b010-472a-bf63-48a3382f5fc0/3f986958- 5ffc-4abc-ad8d-048579bafe2f.mp4
4	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/a45dbbc7- 9122-493a-a984-d33e90348336/ 8580/3b1-2cbb-4c47-912e- c90d330/5a3b.png
5	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/0fcf411d- 8348-4040-94bc-2c0356a9f17b/ca248a50- /2ea-44dd-b490-91bf114ffd57.lens
6	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/bfc78fc6- 90fc-45b5-9e7a-95beb63c3435/cc03afdf- a9a9-46f9-aae0-ce4a3025e0d8.png
7	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/a45dbbc7- 9122-493a-a984-d33e90348336/ 8580/3b1-2cbb-4c47-912e- c90d330/5a3b.png
8	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/a6bf681c- 77f6-4e1f-b752-c30edbf52f79/55f485a5- efc9-4f74-afcc-d2c73ede93f3.mp4
9	Red Ventures—Arcade	Red Ventures LLC	https://storage.googleapis.com/ad-man- ager-creatives-production-us/0ae8e729- 2d26-4381-a813-da7b15c372b1/ a3eb119d-4271-40e7-bb54- c5d960308c48.mp4
10	Discovery	Group Nine Media	https://storage.googleapis.com/ad-man- ager-creatives-production-us/329d1bae- 1b7f-4fa7-815b-7a7efc61b8e7/3a3c10ac- cde8-4d0d-b8a2-6e2504924b65.mp4

207
Snap—Top 100 Most Popular Ads—Confidential—Continued

rank	ad—account—name	organization—name	download—link
11	U.S. Air Force and Space Force Recruiting	GSD&M LLC	https://storage.googleapis.com/ad-man- ager-creatives-production-us/bdbcdc7a- 39c1-4e80-92f2-c856419ae280/7ba5731b- ef09-4bc7-829e-a0493d5260c1.mp4
12	Red Ventures—Apple Music	Red Ventures LLC	https://storage.googleapis.com/ad-man- ager-creatives-production-us/4fda0329- bb62-41ee-9c70-acb8b9b13651/534dbce5- 47cc-46cd-a12c-d3ace/f8567c.png
13	Nike—WITHIN—iOS14	Nike, Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/b009bf46- 1031-4443-944c-2386ac403ad8/ d0a2ca30-5dad-4b39-935a- 371ffd61fc4d.png
14	Twitch Interactive, Inc. Self Service	Twitch Interactive, Inc.	or i juoi je iu.png
15	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/7771c2fe- e3f5-4e8c-9a5e-0f8652da8339/2e18b0b5- d02a-40d5-a54a-67f734a0aba5.png
16	Adobe ROI	Adobe	https://storage.googleapis.com/ad-man- ager-creatives-production-us/50120850- 5df7-4bf6-a892-a89c59582bb9/ff673366- bcce-4722-90ae-bdcd18855b26.mp4
17	Kellogg—PTT	Starcom US	https://storage.googleapis.com/ad-man- ager-creatives-production-us/376cf943- ac25-488-9226-618bdffdfe9/8a398bed- f745-4f1e-aca2-ddf3dc2b2aad.mp4
18	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/eb4b3772- 5d50-46ea-89a3-95bc574818fe/7577a499- d7a2-4d53-920b-b130284c1e14.mp4
19	Red Ventures—App Store	Red Ventures LLC	https://storage.googleapis.com/ad-man- ager-creatives-production-us/0ad57947- d7b0-4bdd-b05a-83833cd34294/ 6344ce54-89cb-459d-bb52- 0d1335547a53.png
20	Red Ventures—Apple Music	Red Ventures LLC	https://storage.googleapis.com/ad-man- ager-creatives-production-us/5f1c513d- 2696-42d8-b13a-1621e4592f43/ 8955cd6d-c5f1-427d-9634- /264fff4f0c7.png
21	Discovery	Group Nine Media	https://storage.googleapis.com/ad-man- ager-creatives-production-us/652cfefd- 1680-4fd3-9ffd-ada2695aaa40/bcd8a491- e6f6-4560-9eb8-c7874e7a5102.mp4
22	Shein-ZOETOP-EC APP- Adtiger-??-APP-IOS14	Baidu (Hong Kong) Limited	https://storage.googleapis.com/ad-man- ager-creatives-production-asia/9ed4efcf- 000d-4eba-ba1b-16c050aba582/ 6978752a-73af-42e5-8113- 3c10bd420bb6.png
23	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/7692cc5d- 94e4-4505-807e-55e65293e465/d4f129cb- d3d1-441f-adaa-2231951c79d5.png
24	Discord Inc. Self Service	Discord Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/820783e3- 168d-4e93-9fb-ddad75a15335/ 8785038d-631f-40fa-9262- 82e9405e9a5f.mp4
25	Target—BrandCampaign	Target Corporation	https://storage.googleapis.com/ad-man- ager-creatives-production-us/1cd42b6b- 888f-4c42-b37d-c4ed4a92d8e2/1d162001- cf6b-4251-aaae-bfd617155126.mp4
26	Kellogg—PTT	Starcom US	https://storage.googleapis.com/ad-man- ager-creatives-production-us/e4272562- c375-4ed1-ba70-b56ccd902cdc/4e1e093c- 4b12-4a2c-b47c-76784a77b6b1.mp4
27	Discovery	Group Nine Media	https://storage.googleapis.com/ad-man- ager-creatives-production-us/d6ccf943- 38be-4fe5-8ae0-7cc3d6bd8f5d/9f8b4a79- 89d5-4bd6-81bb-ffdfb0520dfd.mp4

 ${\bf 208}$ Snap—Top 100 Most Popular Ads—Confidential—Continued

rank	ad—account—name	organization—name	download—link
28	PoshmarkQ4	Poshmark, Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/07896cb6- 440d-4b6d-98fc-1f2e09975abb/8eccb0ee- fd19-4c34-8b88-e45be1e1f527.png
29	[J&J] Clean & Clear	VaynerMedia	https://storage.googleapis.com/ad-man- ager-creatives-production-us/3657612c- 817e-4443-948c-6979f10cfd7e/12c4d744- 7c26-4c09-91c7-8d43b48dea91.png
30	Red Ventures—Apple Music	Red Ventures LLC	https://storage.googleapis.com/ad-man- ager-creatives-production-us/379355eb- ad3f-45b7-80f5-79aad76d9695/2cc8900a- 257b-4ece-bfcf-d13402ca8f95.png
31	FY21—SOC—SC—McDon- ald's—GCM—MMJ—GMA iOS 14.5 [All Segments]	Omnicom Media Group Holdings Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/c54261c5- 85a8-4617-885f-cb4464c8e22a/360e807d- ea2f-4b4f-8b00-7247ee7c14f9.png
32	Red Ventures—Apple Music	Red Ventures LLC	https://storage.googleapis.com/ad-man- ager-creatives-production-us/0eaeddbe- 8c53-4592-836f-4624f6552/18/767- a3a4-455c-965a-f3a4c8932170.mp4
33	Axe—Masterbrand—The Rock—2021	Unilever US—Mindshare	https://storage.googleapis.com/ad-man- ager-creatives-production-us/c8195b5d- 1fd8-4d5a-980c-a70fb49c84a6/83bc3c78- 607e-4664-9de5-cd6a154166d2.mp4
34	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/5aae8937- ba7a-4693-b9a3-ab68e994a06e/efb1ea17- e159-4cb3-8ad7-eb4a59/I1438.png
35	FY21—SOC—SC—McDon- ald's—GCM—MMJ—GMA iOS 14.5 [All Segments]	Omnicom Media Group Holdings Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/0122acf9- 5190-41ad-9a8d-8ed1ce7c0dc8/fa09f75e- lef0-44ce-9deb-c0c1f3ee74bd.png
36	MS—CRL—TSTCRNCH— F22—Social (G1M—CTC— 013)	General Mills	https://storage.googleapis.com/ad-man- ager-creatives-production-us/09768189- daa6-4a62-9d96-13c5ce4efdf1/846483e0- 7d39-4321-af81-16ff7db1b038.mp4
37	FY21—SOC—SC—McDon- ald's—GCM—MMJ—GMA iOS 14.5 [All Segments]	Omnicom Media Group Holdings Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/12c23e6c- 0e97-42b5-aa72-b1b6e9fbc020/5e6c3cc3- 9081-4c22-9c45-afa4aceb96b2.png
38	Twitch Interactive, Inc. Self Service	Twitch Interactive, Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/e36a2270- b668-4c35-bed6-19862790b198/253a8bcc- 14d5-473d-8dc2-96162361d3db.png
39	Hershey's US Jolly Rancher	UM NY—Hershey Social	https://storage.googleapis.com/ad-man- ager-creatives-production-us/bafdaad5- 8fe4-4323-8147-d92bfa3ecc2d/2f48cfdb- e96b-4a01-b089-1d8139f351f5.mp4
40	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/7ce768f5- 5c94-4846-939a-f0dfbf50e4d/373b1452- /2/8-41ac-a7ac-aa543d148d18.mp4
41	PoshmarkiOSWomen	Poshmark, Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/3342f5d6- e175-4df4-86bb-d982a2be1d6a/ 4b4d52bb-eed2-43d5-babc- ca6c2e5304b9.png
42	Hershey's US Jolly Rancher	UM NY—Hershey Social	https://storage.googleapis.com/ad-man- ager-creatives-production-us/bafdaad5- 8fe4-4323-8147-d92bfa3ecc2d/2f48cfdb- e96b-4a01-b089-1d8139f351f5.mp4
43	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/bfc78fc6- 90fc-45b5-9e7a-95beb63c3435/cc03afdf- a9a9-46f9-aae0-ce4a3025e0d8.png
44	Hershey's US Jolly Rancher	UM NY—Hershey Social	https://storage.googleapis.com/ad-man- ager-creatives-production-us/20e58fcb- 63e9-4b09-b5d1-6d40cb0dc471/ e90acdd6-a906-41dd-b963- ad730437c596.mp4

209
Snap—Top 100 Most Popular Ads—Confidential—Continued

rank	ad—account—name	organization—name	download—link
45	Red Ventures—Apple Music	Red Ventures LLC	https://storage.googleapis.com/ad-man- ager-creatives-production-us/fd0c2de1- 0b4b-402a-900b-c1f1c35c9f0f/311b310b- c237-4693-8667-14bf4ec1b05a.jpg
46	Vans Self Service	Vans	https://storage.googleapis.com/ad-man- ager-creatives-production-us/1be8e123- 9f70-4e82-9b9d-cac0faf464fa/b6386336- 1296-4b85-82c6-06ff25e8ee00.MOV
47	[J&J] Clean & Clear	VaynerMedia	https://storage.googleapis.com/ad-man- ager-creatives-production-us/a26305a8- 3468-49ce-8002-434681/8cb07/07524f75- 98a7-4169-948b-f52680b67764.png
48	Cl:MDLZ—Br:SOUR PATCH KIDS—Sub-Br:BASE— Cat:CONFECTIONS—Sub- Cat:CANDY—Cur:USD— Geo:USA—Free:SC	VaynerMedia	https://storage.googleapis.com/ad-man- ager-creatives-production-us/3f67e547- 3b06-4857-959d-3778a85ae13e/ 33105423-dd15-42da-b411- 1bd7f8abaeef.mp4
49	Discovery	Group Nine Media	https://storage.googleapis.com/ad-man- ager-creatives-production-us/f229e8bf- dc7b-4841-a812-8e8b90519b0f/c9fdab5f- 6b78-496b-883a-b4867fff3772.mp4
50	MS—CRL— Extramoredinary—F21—Social (G1M—CTC—011)	General Mills	https://storage.googleapis.com/ad-man- ager-creatives-production-us/8555d870- aee3-45f7-98f8-b577288b9c65/718c0402- 28d8-4d36-9177-eee60a11e71e.mp4
51	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/2312d223- 4e58-4ae8-8101-2c2d3626de28/ d707d141-3dd1-43a6-ab57- a524536bbf60.png
52	Hershey's US Jolly Rancher	UM NY—Hershey Social	https://storage.googleapis.com/ad-man- ager-creatives-production-us/20e58fcb- 63e9-4b09-b5d1-6d40cb0dc471/ e90acdd6-a906-41dd-b963- ad730437c596.mp4
53	Red Ventures—Apple Music	Red Ventures LLC	https://storage.googleapis.com/ad-man- ager-creatives-production-us/6db9e1a5- 40fd-4ee0-900c-533be4bf4ccd/71af20ba- 872c-4d9f-a317-a23505186733.jpg
54	Schiefer ChopShop	Vans	https://storage.googleapis.com/ad-man- ager-creatives-production-us/cebaf9c5- 2604-45db-8c02-8244b5ccbd23/a61f05b4 3fde-41e2-9647-73e4c2042d83.png
55	SDC—U.S Core	SmileDirectClub LLC	https://storage.googleapis.com/ad-man- ager-creatives-production-us/c8621bb5- ba33-47c2-a00c-1104459f1776/b6a31a97 a9d3-4d9c-b1c6-c713ca2a67e4.mp4
56	MS—MLS— TOTFRZNHTSNCKS— Totino's Teen—F21 (G1M— TOT—020)	General Mills	https://storage.googleapis.com/ad-man- ager-creatives-production-us/b8bae064- 5812-4986-a9cd-926936638970/ccf21fe3- d9d6-4264-9a5b-fec835c1fecc.mp4
57	Narrative—Episode—iOS14	Pocketgems	https://storage.googleapis.com/ad-man- ager-creatives-production-us/9fd61950- 73de-47ca-8e7e-de65ebf55f41/7a0f8367- 6af3-4712-8472-38cbc6d37cfc.png
58	MS—CRL—TSTCRNCH— F22—Social (G1M—CTC— 013)	General Mills	https://storage.googleapis.com/ad-man- ager-creatives-production-us/b67a214c- 1658-4948-86da-85cc3df7b77b/a5f70b69 9d78-4320-8872-c5e915a93707.mp4
59	truth campaign in-house ad account	Truth Initiative Foundation	https://storage.googleapis.com/ad-man- ager-creatives-production-us/63d16b85- 8f7b-4ba4-837f-937856441430/bc7669c2 a8f2-4acb-a380-6f4881a826ae.png
60	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/fc35c500- 0165-4c06-ac2f-69c0885160b3/c47a345d 6f38-43cd-8b83-432a76e46dc3.png
61	Schiefer ChopShop	Vans	https://storage.googleapis.com/ad-man- ager-creatives-production-us/0ec066b4- 4767-480c-be4a-913f16dad080/7fce8fd3- 4dfe-4e78-a77d-2a2773f72cf0.png

rank	ad—account—name	organization—name	download—link
62	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/d1fe1329- 6c15-4abc-91ba-482267d346a8/ 379462dd-c0ce-43ff-9b0f- c42ce343eb9e.mp4
63	PoshmarkiOSWomen	Poshmark, Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/d80618ff- ded4-40ea-9d1d-fa7e79f4ccee/a40d49a2- 9456-4aca-bfac-6af581daa540.png
64	Curology	Curology, Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/75c18aeb- d9f0-46f5-829b-a57c91afd4ef/fcb503da- 4add-4743-8efe-d1a069e62f0c.mp4
65	Nike—WITHIN	Nike, Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/eafa9847- 690f-41e9-801f-6353de0e7c8b/9b327822- eb55-4984-b811-77ce5b3ffce9.png
66	FY21—Q1-Q2—McDonald's— GCM—GMA 2021—MMJ— GM3—205&206	Omnicom Media Group Holdings Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/eea8bbcb- 1b48-44ee-a3e3-22e9580073ea/6fcdb8fc- a732-444f-9162-3d8b45896361.png
67	Marine Corps 2019	Mindshare	https://storage.googleapis.com/ad-man- ager-creatives-production-us/c14a8309- ffe2-41b7-9c53-bf8c4f77d1a7/a8b08667- 0421-4535-8aaf-13807d483479.png
68	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/1290a0e4- 9d67-47ab-bd67-6f70b9e9ea93/7922e7da- 06b1-4373-a017-6cdd7e90a436.mp4
69	Target—BrandCampaign	Target Corporation	https://storage.googleapis.com/ad-man- ager-creatives-production-us/cbccb41e- a211-49dd-b071-dc7c8dac0db5/ 7c6510b-b89d-4fcb-8a6d- 9ad4f94b95fd.mp4
70	Tubi (IOS)	Tubi TV	https://storage.googleapis.com/ad-man- ager-creatives-production-us/7655a4ff- 5ba8-47f2-8be1-f9d01a959ee6/f8cf97e5- 3c13-436e-b123-f70b1db0df7c.mp4
71	Gatorade—2021—Gatorade—Gatorade Portfolio—Q3Brand—PGD CE 250	Omnicom Media Group Holdings Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/e5f4f712- b447-495f-b18b-f4eedff4b4dd/714f40a8- 270f-4f14-8cdd-65fa1497f630.lens
72	Snow	Structured Social LLC	https://storage.googleapis.com/ad-man- ager-creatives-production-us/25c46c6e 46f7-4042-a90a-6365c6f4d2d4/39278f93- a122-41f6-906f-a0718a11eb06.png
73	MS—MLS— TOTFRZNHTSNCKS— Totino's Teen—F21 (G1M— TOT—020)	General Mills	https://storage.googleapis.com/ad-man- ager-creatives-production-us/1674d695- 8c58-4ec2-b068-f5fb4b710680/82ce9af7- 33a7-406e-a193-680ab30c5bfd.mp4
74	MS—CRL— Extramoredinary—F21—Social (G1M—CTC—011)	General Mills	https://storage.googleapis.com/ad-man- ager-creatives-production-us/909e77ba- a556-42cf-a6ec-cddabd249bab/d35fb1ff- 5043-4b17-b430-379a7182b0e8.mp4
75	Hershey's US Reese's	UM NY—Hershey Social	https://storage.googleapis.com/ad-man- ager-creatives-production-us/31e646bd- 29/9-4a2e-84a8-211758b7ad91/65cba178- f539-436b-9784-91d9fdf30e16.mp4
76	Red Ventures—Apple Music	Red Ventures LLC	https://storage.googleapis.com/ad-man- ager-creatives-production-us/c8250784- 47bf-491b-bce7-f2e210a61e98/1d82bc92- 78da-4cf4-b8f4-97a6bfcadf47.png
77	Target—BrandCampaign	Target Corporation	https://storage.googleapis.com/ad-man- ager-creatives-production-us/1cd42b6b- 886f-4c42-b37d-c4ed4a92d8e2/1d162001- cf6b-4251-aaae-bfd617155126.mp4
78	Twitch Interactive, Inc. Self Service	Twitch Interactive, Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/e36a2270- b668-4c35-bed6-19862790b198/253a8bcc- 14d5-473d-8dc2-96162361d3db.png

 ${\Large 211}$ Snap—Top 100 Most Popular Ads—Confidential—Continued

rank	ad—account—name	organization—name	download—link
79	TYROO—SS—SnA—IEC- WSP—DIRECT—VN	Smile Internet Technologies PTE. Limited	https://storage.googleapis.com/ad-man- ager-creatives-production-asia/0df8c884- 76f4-4b8e-aa85-c3218919ff06/a4d9e911- 7251-439f-b462-f3fc38f3a10e.png
80	Discord Inc. Self Service	Discord Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/db2fbc85- b8cc-437d-ac92-c0cf9f6ed40e/12792900- cde1-48ff-819a-402ceb59fad7.mp4
81	Kellogg—PTT	Starcom US	https://storage.googleapis.com/ad-man- ager-creatives-production-us/b4d2e576- b6cb-4f37-b142-ca889008b346/68212318- 7dca-4007-8ab5-d36a89117731.jpg
82	FY21—Q1-Q2—McDonald's— GCM—GMA 2021—MMJ— GM3—205&206	Omnicom Media Group Holdings Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/4ef907e8- 06fe-4be0-8608-1e19d6c40537/fa812bd3- fa3e-49c3-9eb9-eb04f25c7474.png
83	2020	Subway Restaurants	https://storage.googleapis.com/ad-man- ager-creatives-production-us/601e8634- c115-4306-9cf9-48adffd7a2d3/a23c146f- b97f-45f9-bc9d-0484ab50a352.mp4
84	Narrative—Episode—iOS14	Pocketgems	https://storage.googleapis.com/ad-man- ager-creatives-production-us/9183b902- 3b5a-4ab3-9287-6f0010a1b147/a56c61c3- 1315-4a43-bc51-d3a1df4300a6.png
85	Red Ventures—Apple Music	Red Ventures LLC	https://storage.googleapis.com/ad-man- ager-creatives-production-us/4261f3b2- 3930-4a3a-ba61-25e1976a5223/f7a1c8d6 bd9b-4459-b5f9-21499d49e355.png
86	Tubi (IOS)	Tubi TV	https://storage.googleapis.com/ad-man- ager-creatives-production-us/7655a4ff- 5ba8-47f2-8be1-f9d01a959ee6/f8cf97e5- 3c13-436e-b123-f70b1db0df7c.mp4
87	PoshmarkiOSWomen	Poshmark, Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/82ce237e- 5a60-495c-a175-7e41dcd989f3/730465ad 7d60-4071-a6d5-de001a40d4fc.png
88	Discovery	Group Nine Media	https://storage.googleapis.com/ad-man- ager-creatives-production-us/cbf02b63- e0a3-4d35-890b-be08beae584e/e4432b37- 0811-4698-812d-e16f17bdb88f.mp4
89	Nike—WITHIN	Nike, Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/f05ecd32- a4c4-40e4-9ac3-104a22da4fc8/36222309- 9afd-4f83-85be-76ad14d6949b.png
90	PoshmarkQ4	Poshmark, Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/00e231df- 0b9f-490b-9174-c8aef9cb9d2d/e8ef89bb- 8255-401e-a6d0-b37f85ab44ea.png
91	KOLLAB DOS	KOLLAB STUDIOS LLC	https://storage.googleapis.com/ad-man- ager-creatives-production-us/726a7871- 0739-413b-8264-24fd89dde1e0/ d8d8d362-4c0b-4165-a212- 5f7da7f709ff.MOV
92	KO—NASC—Sprite—2018— present	Universal McCann New York	https://storage.googleapis.com/ad-man- ager-creatives-production-us/96d81533- 907e-4bbe-830a-5d9134a63193/ e6b8a9b0-a147-42cb-b03e- 185f0ed0ac2.mp4
93	Invisalign	Align Technology	https://storage.googleapis.com/ad-man- ager-creatives-production-us/ldcd7cf5- 0ed3-4486-8284-eed6c8613bd1/f7048fe7- f1d1-4d97-9c25-89a03029a451.png
94	Kellogg—PTT	Starcom US	https://storage.googleapis.com/ad-man- ager-creatives-production-us/fd5ac2d5- 6a6b-4d16-81ad-4704e3d08eec/d0283e27 ec90-4d0f-8fe4-18479fd896e9.mp4
95	Nike—WITHIN—iOS14	Nike, Inc.	https://storage.googleapis.com/ad-man- ager-creatives-production-us/eb1495c1- 4782-4736-bee2-3e2a5638477c/e1cc15c8- ea53-4f11-a897-85c570c5e6ba.mp4

Snap—Top 100 Most Popular Ads—Confidential—Continued

rank	ad—account—name	organization—name	download—link
96	SDC—U.S Core	SmileDirectClub LLC	https://storage.googleapis.com/ad-man- ager-creatives-production-us/7608c5fc- 977b-42f0-8068-0b0bcfa5d288/c095350b- 0a33-482f-9fd5-ea5d6cd641ea.mp4
97	Narrative—Episode—iOS14	Pocketgems	https://storage.googleapis.com/ad-man- ager-creatives-production-us/791c339a- 48bc-4f18-b7eb-a29a417d9b98/bd5771e0- 1c60-4b24-a838-b27eb930de43.png
98	KO—NASC—Fanta—2019— present	Universal McCann New York	https://storage.googleapis.com/ad-man- ager-creatives-production-us/1303f62c- 5681-48e8-ba08-11956b41234d/ 9cab6bd8-0ac0-45bb-8768- 577de9caf871.mp4
99	PetSmart Inc Self Service	PetSmart Inc	https://storage.googleapis.com/ad-man- ager-creatives-production-us/3659b93d- e0db-4a8f-bf93-5a63817f9c94/acd79865- 76c4-426b-8976-e53b239fde1f.mp4
100	PetSmart Inc Self Service	PetSmart Inc	https://storage.googleapis.com/ad-man- ager-creatives-production-us/f8aa6c8f- de87-41b5-8a10-c7f3854175dd/da301f17- 5e28-41c1-94c6-0844193262a4.mp4

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO MICHAEL BECKERMAN

Preventing Child Sexual Exploitation and Grooming. According to the National Center for Missing and Exploited Children (NCMEC), 2020 was record-breaking for reports of child sexual exploitation, and this year has already exceeded that number of reports. In November 2019, I led a bipartisan letter to TikTok and other tech companies about what you are doing to stop child sexual exploitation.

Question 1. What technologies do you have in place to automatically monitor for the grooming and enticement of children and report these crimes swiftly? If none, please explain why not.

Answer. TikTok is committed to leveraging advanced technology to prevent, detect, remove, and report online child sexual exploitation content, including the grooming and enticement of children. Our Community Guidelines include policies that prohibit video, audio, livestream content, and accounts that depict or promote predation or grooming. We use artificial intelligence to identify potentially violating content or accounts and we create training modules to provide additional support to our human moderators who are reviewing such content. We also have implemented age-appropriate controls designed to help keep minors safe, including disabling direct messaging and hosting live streams for users under 16 years old. In addition, users can utilize the in-app report feature to report a video that they believe contains inappropriate content. If TikTok becomes aware of violative content, we will take immediate action to remove content, terminate accounts, and report cases to NCMEC and law enforcement as appropriate. All of these measures combine to help protect against minor grooming and enticement type content.

Question 2. What technologies do you have in place to detect and stop predators from inducing children to send explicit images, videos, or live-streams of themselves? If none, please explain why not.

Answer. First and foremost, it is not possible to send an off-platform video or

image via our direct messaging feature on TikTok.

Explicit images are prohibited by our Community Guidelines, which state that "we do not allow depictions, including digitally created or manipulated content, of nudity or sexual activity." We utilize a variety of technologies, including Photo DNA, to identify such content to ensure that we swiftly identify and remove this content from the platform. As mentioned above, both our direct messaging and hosting of livestream features require a user to be at least 16 years of age to further reduce the possibility of younger users receiving inappropriate communications. In addition, users aged 16–17 have their direct messaging by default set to friends only.

Question 3. What technologies do you have in place to detect Child Sexual Abuse Material (CSAM) videos, both for known CSAM (such as the NCMEC hashlist) and new CSAM videos? If none, please explain why not.

Answer. Studies have shown that CSAM is linked to and spread via private messaging. (See, e.g., https://www.innocentlivesfoundation.org/how-predators-have-in-

filtrated-social-media; https://www.missingkids.org/blog/2020/grooming-in-the-digital-age). As previously mentioned, TikTok restricts direct messaging to accounts ages 16 and over, and it is not possible to send an off-platform attachment (video

or image) via our direct messaging feature on TikTok.

TikTok has invested heavily in human and machine-based moderation tools to find and remove violative content, including CSAM. The systems and measures we have put in place, including the use of Photo DNA, work to proactively identify illegal and harmful content, and our automated technology filters and detects potentially violating content. Our human moderators review and determine whether content violates the Community Guidelines. If we become aware of violative content, we will take immediate action to remove content, terminate accounts, and report cases to NCMEC and law enforcement as appropriate. The NCMEC Hash Integration, integrated with NCMEC hash-sharing resource, is one of several tools we use to detect and swiftly remove and report CSAM.

Question 4. Do you have specific mechanisms for users to report child sexual ex-

ploitation? If so, please elaborate on them; if not, please explain why not. Answer. Any video can be reported and flagged for review by any user. Users can report content that potentially violates our Community Guidelines, including minor safety issues, through our in-app reporting feature. Finally, anyone can report inappropriate content or users via our webform.

Question 5. Do you include IP addresses in all reports to NCMEC? If not, please explain why not. Answer. Yes.

Question 6. Please provide your policies and protocols on how you respond to law enforcement when they reach out for information relating to child sexual exploitation reports

Answer. TikTok's Law Enforcement Guidelines (available at https://www.tik tok.com/legal/law-enforcement) set forth the protocols for law enforcement officials seeking the data of users of the TikTok platform. TikTok also has internal policies and procedures governing how TikTok handles and responds to law enforcement requests, including requests related to child sexual exploitation. These policies require that TikTok disclose user data to law enforcement only where a request is based on a valid legal process or in emergency circumstances.

Dangerous Content and Algorithmically-amplified Rabbit Holes. Videos on TikTok have shown young users dangerous content, and when these videos are part of challenges, they are seen widely across the platform. You said TikTok was never able to find evidence of a Blackout Challenge on the platform, despite widespread media coverage of the tragic deaths from this challenge and current videos on TikTok warning against participation in the challenge. Moreover, my staff have found videos of dangerous challenges like kids trying to pass out and encouraging others to do the same, some of which have been up for over a year.

Question 1. Please explain the discrepancy between your statements and the reports of deaths due to Blackout Challenges on TikTok.

Answer. Safety of our community is our priority. We strictly prohibit dangerous challenges, including so-called "blackout challenges", as such challenges would violate our Community Guidelines. We have removed "blackout challenge" and similar hashtags on the platform, and if someone searches for "blackout challenge", there would be no results. While we still have not found evidence of a "blackout challenge" trending on our platform, we remain vigilant in our commitment to user safety.

To that and a few months are we leaveled a clobal project to be the sunday.

To that end, a few months ago, we launched a global project to better understand young people's engagement with potentially harmful challenges and hoaxes. While not unique to any one platform, the effects and concerns are felt by all—and we wanted to learn how we might develop even more effective responses as we work to better support teens, parents, and educators. On November 17, 2021 we released the results of our research (available at: https://praesidiosafeguarding.co.uk/reports). We have used the findings from the report to inform a review of our policies and processes, and we're making a number of improvements to build on our existing safeguards. For example, we have developed a new resource for our Safety Center dedicated to challenges and hoaxes. This includes advice for caregivers that we hope can address the uncertainty they expressed about discussing this topic with their teens. We have also worked with experts to improve the language used in our warning labels that would appear to people who attempt to search our platform for content related to harmful challenges or hoaxes. Should people search for hoaxes linked to suicide or self-harm, we will now display additional resources in search. More information is available in our Newsroom here: https://newsroom.tiktok.com/en-us/ helping-our-community-stay-safe-while-having-fun-on-tiktok.

Question 2. Please describe in detail the content moderation processes—both through machine learning and manual review by TikTok employees or agents—that TikTok uses to screen for and remove content related to the Blackout Challenge, passing out, self-harm, and related content.

passing out, self-harm, and related content.

Answer. TikTok uses a combination of human and machine-based moderation tools to detect and remove violative content, which includes content related to self-

harm and dangerous acts.

All content uploaded to TikTok first runs through a level of automated review. Our automated technology systems continuously learn and adapt using data in each video, as well as from the ultimate moderation decisions that are made downstream based on their observations and predictions. Content that has a high probability of violating TikTok's guidelines is prioritized for review by our moderation team. If content is found to be violative of our guidelines, then the action prescribed by the relevant guideline—for example, removal of content—is immediately implemented.

relevant guideline—for example, removal of content—is immediately implemented. Another strategy we use to counter potentially dangerous content is to block certain key words and their variants. For example, if someone searches for blackoutchallenge, they will see a clickable message of how they can learn how to recognize harmful challenges. This means a user cannot access content with these terms via search, the terms will not be clickable from a video, and users will not be able to use these as hashtags in the future. Users are also prohibited from using these blocked terms in their account usernames.

In addition to our proactive measures, our teams also diligently stay alert to trends to ensure any new potentially violative content is detected and removed as

quickly as possible.

Question 3. How effective are these review processes? How do you measure this effectiveness, given that you said 94 percent of content violations are removed

proactively yet this content was still readily accessible?

Answer. As reported in our most recent Transparency Report, for the period April—June 2021, approximately 81.5 million videos were removed globally for violating our Community Guidelines or Terms of Service, which is less than 1 percent of all videos uploaded. Of those videos, we identified and removed 93 percent within 24 hours of being posted, 94 percent before a user reported them, and 87.5 percent at zero views.

While we believe these statistics reflect that we have made great strides in our content moderation policies and procedures, we recognize that our work is never finished and continue to look for ways to improve our technology, policies, and procedures.

Question 4. Recently, the Wall Street Journal reported a disturbing increase in the number of teens exhibiting tics, like physical jerking movements and verbal outbursts, which doctors and researchers have linked this to TikTok. Some hospitals are reporting a ten-fold rise in tic-like behaviors among teens. What is TikTok doing

to combat this problem?

Answer. We continue to consult closely with experts, who caution that correlation does not mean causation and more research is necessary to better understand this specific experience. Similarly, the fact-checking organization Snopes recently concluded that "Social media consumption is just one possible explanation researchers provided alongside other stressors, including those related to coronavirus lockdowns as well as diagnoses of other mental health conditions . . . Furthermore, the claim is based on two observational reports published in peer-reviewed medical journals and not the results of a regimented scientific study. This suggests a correlation and one possible explanation, but it does not prove a causation."

Gun Videos Violating Community Guidelines. TikTok's community guidelines state: "we do not allow the depiction, promotion, or trade of firearms, ammunition, firearm accessories, or explosive weapons. We also prohibit instructions on how to manufacture those weapons." Unfortunately, content that violates these guidelines is frequently posted on TikTok. According to some reports, clips of guns and related content have been viewed nearly half a million times with hundreds of comments. Alarmingly, some gun dealers are taking customer orders in the comments section of these popular TikTok videos. Other reporting has highlighted how TikTok is enabling young users to find instructions for making their own homemade firearms using downloadable 3–D printing instructions.

Question 1. Please describe in detail the processes—both through machine learning and manual review by TikTok employees or agents—that TikTok utilizes to enforce the community guidelines with respect to the depiction, promotion or trade of guns.

Answer. TikTok prohibits and removes content that promotes or seeks to trade firearms, ammunition, firearm accessories, or explosive weapons, as well as instruc-

tions for manufacturing weapons. We do so to ensure that weapons are neither glorified when used for violence nor is TikTok used as a means of illegal arms sale. We do however make exceptions for the depiction of weapons in certain safe and controlled environments. As stated in our Community Guidelines: "Content as part of a museum's collection, carried by a police officer, in a military parade, or used in a safe and controlled environment such as a shooting range may be allowed."

TikTok uses a combination of human and machine-based moderation tools to de-

tect and remove violative content, which includes content related to the depiction,

promotion, or trade of guns.

All content uploaded to TikTok first runs through a level of automated review.

Our automated technology systems continuously learn and adapt using data in each video, as well as from the ultimate moderation decisions that are made downstream based on their observations and predictions. Content that has a high probability of violating TikTok's guidelines is prioritized for review by our moderation team. If content is found to be violative of our guidelines, then the action prescribed by the relevant guideline—for example, removal of content—is immediately implemented.

Additional strategies that we utilize include the blocking and redirecting to our

Community Guidelines certain key words and their variants. This means a user cannot access content with these terms via search, the terms will not be clickable from a video, and users will not be able to use these as hashtags in the future. Users are now prohibited from using these blocked terms in their account usernames.

We also continually refine our moderator guidance to clarify and enhance our enforcement on content involving the sale, trade, redirection to sale, and instructions to make firearms, firearm accessories, explosive weapons, and ammunition. We've also expanded our definition of firearms to broaden our moderation and enforcement

Question 2. Is there a specialized team of content moderators specific to this issue set? If so, approximately how many employees work on this issue?

Answer. TikTok's Trust and Safety teams have experts as well as moderators who focus on Illegal Activities and Regulated Goods. TikTok has thousands of moderators working to protect the TikTok community and integrity for our platform.

Question 3. What steps has TikTok taken to ensure content related to ghost guns and 3D printed guns do not appear on its platform? If none, please explain why not.

Answer. We treat ghost guns and 3D printed guns the same as we do any other weapon and do not allow content that depicts methods to manufacture, trade or glorify these weapons or associated accessories. TikTok uses an AI model to detect firearms in videos. Like our approach to traditional weapons, we have invested in training our automated technologies, as well as training our moderators, to recognize these weapons when conducting their content evaluations.

Question 4. For posts deemed to violate TikTok's community standards with respect to the depiction, promotion or trade of guns, what is the average time it takes TikTok to identify and remove such posts?

Answer. During the second quarter of this year, 20.9 percent of the videos removed violated our policy that prohibits criminal activities or the promotion or trade of drugs, tobacco, alcohol, and other controlled substances or regulated goods. 95.7 percent of these videos were removed within 24 hours of being posted, 92.3 percent were removed at zero views, and 97.1 percent were removed before any reports.

Question 5. What does TikTok view as the major hurdles to enforcement of its community guidelines with respect to the depiction, promotion or trade of guns?

Answer. We recognize there is no finish line when it comes to safety and that ne-

farious actors will continue to try to manipulate our platform for their own gain. Examples of this include actors using coded language, or depicting dissembled or otherwise masked weapons. We work with a range of experts to identify such workarounds or tactics to ensure they do not take a foothold on our platform. These experts have also offered insights on our policies and shared research with us.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. AMY KLOBUCHAR TO MICHAEL BECKERMAN

Social Media and Eating Disorders. Studies have found that eating disorders have one of the highest mortality rates of any mental illness. At the hearing, I asked TikTok about research related to eating disorder content on TikTok. You said you were not aware of any research studies TikTok has conducted about how your apps

¹https://anad.org/get-informed/about-eating-disorders/eating-disorders-statistics/

push content promoting eating disorders to teens, but that TikTok works with "outside experts" to understand these issues

Question. Please share any studies TikTok is aware of, including involving outside researchers, related to the relationship between TikTok and eating disorders.

Answer. TikTok has partnered with the National Eating Disorders Association

(NEDA) to raise awareness about eating disorders. TikTok worked with NEDA and other experts to develop in-app resources to provide access to help from expert organizations, and these conversations informed the list of searches and hashtags that we redirect to the NEDA helpline (and for which we block results). Additionally, we consult with NEDA and other experts on our eating disorder related policies and language in our Community Guidelines.

In September 2021, TikTok expanded on these resources with a new Safety Cen-

the September 2021, TixTok expanded on these resources with a new Salety Center guide on eating disorders for teens, caregivers, and educators (available at https://www.tiktok.com/safety/en-us/eating-disorder/). Developed in consultation with independent experts including the National Eating Disorders Association (NEDA), National Eating Disorder Information Centre, Butterfly Foundation, and Bodywhys, this guide will provide information, support and advice on eating dis-

Advertising and Teenagers. Tik Tok earns revenue from showing ads.

Question 1. Please provide copies of the 100 most popular ads, in terms of

Answer. Information relating to advertising performance, such as viewership, is confidential and sensitive information, both to TikTok and to TikTok's advertisers to which TikTok has confidentiality obligations. Please note that TikTok makes available some of its top performing ads in the Creative Center it maintains for registered advertisers, available at https://ads.tiktok.com/business/creativecenter/inspiration/topads/pc/en, only when the advertiser has granted TikTok permission. TikTok does not share total viewership of the ads that are available in the Creative Center.

Question 2. Please also provide copies of the 100 most popular ads, in terms of viewership, among teenagers on your platform in the last year.

Answer. Information relating to advertising performance, such as viewership among teenagers, is confidential and sensitive information, both to TikTok and to TikTok's advertisers to which TikTok has confidentiality obligations. Please note

that TikTok makes available some of its top performing ads in the Creative Center it maintains for registered advertisers, available at https://ads.tiktok.com/business/creativecenter/inspiration/topads/pc/en, only when the advertiser has granted TikTok permission. TikTok does not share total viewership of the ads that are available in the Creative Center.

Advertising Revenue. TikTok is privately held, so we don't have public documents on your advertising revenue per user.

Question 1. TikTok's best estimate of advertising revenue per U.S. user for the last quarter?

Answer. TikTok generates substantially all of its revenue from selling advertising. However, details regarding the company's revenue constitute confidential and proprietary business information, which we do not share publicly.

Question 2. How much of TikTok's U.S. revenue came from users under the age of 18? If precise data is not available, provide an estimate.

Answer. TikTok generates substantially all of its revenue from selling advertising. However, details regarding the company's revenue constitute confidential and proprietary business information, which we do not share publicly.

Algorithms for Content Moderation. Frances Haugen disclosed that Facebook has been misleading the public about how well it can detect and remove harmful content. 2 Facebook's internal documents estimated that their automated systems removed less than one percent of prohibited violent content."

Question. Has TikTok collected any data about how often TikTok's automated content detection systems failed to capture content on TikTok that violates the company's terms of service in the last 18 months? If so, please provide that data.

Answer. TikTok discloses removals of violative videos in our quarterly Community Guidelines Enforcement Reports. TikTok began disclosing total removals based on

² https://www.wsj.com/articles/facebook-ai-enforce-rules-engineers-doubtful-artificial-intel-

automated content detection in our April-July 2021 report. During 2021Q2, 81,518,334 videos were removed globally for violating our Community Guidelines or Terms of Service, which is less than 1 percent of all videos uploaded. During this time-frame we also continued to roll out technology in additional markets that automatically detects and removes some categories of violative content. As a result, 16,957,950 of the total removals were handled through this technology.

Children on Social Media. TikTok allows kids under 13 in the United States to use the TikTok app through TikTok's "experience for Younger Users." 4

Question. How many under 13 accounts have you removed from TikTok-not

TikTok's experience for kids—in the last year?

Answer. Earlier this year TikTok began proactively disclosing data in our Community Guidelines Enforcement Reports regarding the removal of suspected underage accounts. Although other platforms have made similar disclosures, we note that

TikTok was the first company to do so.

In the first quarter of 2021, 7,263,952 suspected underage accounts were removed globally from the full TikTok experience for potentially belonging to a person under the age of 13.

In the second quarter of 2021, 11,205,597 suspected underage accounts were removed globally from the full TikTok experience for potentially belonging to a person under the age of 13.

Harmful Content on Social Media. TikTok now has more than a billion users,5 yet TikTok's algorithm is a secretive black box to almost everyone. A recent investigation by the Wall Street Journal showed that TikTok can easily push teen users into rabbit holes of potentially harmful content, including content that TikTok supposedly bans, related to eating disorders, drugs, and violence.6

Question. Reports have indicated a significant portion of TikTok's user base is minors. Approximately how many of your U.S. users are under the age of 18? How many are under 13?

Answer. To learn more about TikTok's recommendation system, please see our Newsroom post for additional details: https://newsroom.tiktok.com/en-us/howtiktok-recommends-videos-for-you. We also release regular transparency reports, and we routinely provide public updates on our efforts to continuously improve platform safety. Our Content Advisory Council brings together technology and safety experts who help shape our forward-looking policies that not only address the challenges of today, but also plan ahead for the next set of issues that our industry will face. And we have also opened our Transparency and Accountability Centers, which due to constraints as a result of the coronavirus pandemic are currently virtual experiences. At TikTok Transparency and Accountability Centers, invited guests and experts will have the opportunity to review:

- · How our trained content moderators apply TikTok's Community Guidelines to review the content and accounts that are escalated to them via user reports and technology-based flagging.
- Our data security practices and the measures we're taking to safeguard user privacy and information.
- · TikTok source code, which will be made available at the center for testing and evaluation. Additionally, visitors will learn how our application's algorithm operates.

We do not publicly share details on user demographics.

Social Media and Medical Impacts. A recent Wall Street Journal report highlighted several instances of teenage girls going to their doctors' offices with tics, including physical jerking movements and verbal outbursts. Doctors have said that content watched on TikTok might be playing a factor in teens developing tics.8

 $^{^4}$ See $https://www.tiktok.com/legal/privacy-policy-for-younger-users?lang=en <math display="inline">^5$ https://newsroom.tiktok.com/en-us/1-billion-people-on-tiktok

⁶ https://www.wsj.com/articles/tiktok-algorithm-sex-drugs-minors-11631052944?mod=Search results_pos9&page=1

⁷ https://www.wsj.com/articles/tiktok-tops-1-billion-monthly-users-11632760678?mod=Search results pos7&page=1

⁸ https://www.wsj.com/articles/teen-girls-are-developing-tics-doctors-say-tiktok-could-be-a-fac-

Question. TikTok has stated that they are looking into the connection between videos on TikTok and teens developing tics. What is the company doing right now to intervene to protect kids on TikTok while doctors and researchers examine this issue?

Answer. We continue to consult closely with experts, who caution that correlation does not mean causation and more research is necessary to better understand this specific experience. Similarly, the fact-checking organization Snopes recently concluded that "Social media consumption is just one possible explanation researchers provided alongside other stressors, including those related to coronavirus lockdowns as well as diagnoses of other mental health conditions. . . Furthermore, the claim is based on two observational reports published in peer-reviewed medical journals and not the results of a regimented scientific study. This suggests a correlation and one possible explanation, but it does not prove a causation.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARSHA BLACKBURN TO MICHAEL BECKERMAN

Question 1. Do you get parental consent when you do research on kids? Can you

provide a copy of a blank parental consent form, if applicable?

Answer. TikTok has engaged external experts to conduct research on the topics of dangerous challenges and cyberbullying, and in both cases, the third parties we engaged sought parental consent.

Question 2. Can you provide clarity on your chain of ownership and whether the language in your privacy policy saying you share language "with your parent company and affiliates" means that you share U.S. user data with ByteDance or its employees or contractors?

Answer. The TikTok platform collects personal information from U.S. users in accordance with its Privacy Policy. All U.S. user data is stored on servers located in

the U.S., with backup data stored on servers in Singapore.

Some ByteDance entities provide services that support the operation of the TikTok platform, such as providing technical support services. To the extent that these support functions require ByteDance entities to access U.S. user data, such access is remote (as U.S. user data is stored in the U.S. and Singapore), and steps are taken to limit such access, including restricting who has access to which dataset, implementing strong authentication measures, logging of access, limiting access periods, and encrypting data.

Question 3. Why do you say in your testimony that you aren't aware that viral trends like "Devious Licks" were on your site?

School administrators in Tennessee have suffered serious property damage from content like this. How does this square with comments about TikTok's commitment to removing dangerous content?

How do your content moderators go about becoming aware of such videos to deter-

mine what to remove or deprioritize

Answer. Over the last year, there have been increasing concerns around online challenges and hoaxes. Although these concerns are not unique to any one platform (and, in some instances, have been focused on so-called challenges that TikTok has not found evidence of on our platform), TikTok takes seriously our responsibility to support and protect teens, and to help limit exposure to content about challenges that may be harmful or dangerous.

Content that depicts dangerous or criminal activities violates TikTok's Community Guidelines, and we remove such content from our platform as soon as we discover it. With regard to the "Devious Licks" challenge that impacted various platforms, including TikTok, we moved quickly to identify and remove associated videos and audio from our platform as soon as we became aware of them. Overall, we removed more than 200,000 videos related to this trend.

TikTok uses a combination of human moderators and machine-based moderation tools to detect and remove content that violates our Community Guidelines, which prohibit content related to dangerous or criminal activities. All content uploaded to TikTok first runs through a level of automated review. Our automated technology systems continuously learn and adapt using data in each video, as well as from the ultimate moderation decisions that are made by human moderators based on their observations and predictions. The automated filters remove certain content automatically and flag other content for prioritized review by our human moderation team. If content is found to be violative of our Guidelines, then the action prescribed

 $^{^9\,}https://www.wsj.com/articles/teen-girls-are-developing-tics-doctors-say-tiktok-could-be-a-fac-doctors-s$

by the relevant guideline (e.g., removal of content) is implemented. In addition to these proactive measures, our teams also diligently stay alert to trends to ensure that any new potentially violative content is detected and reviewed as quickly as

possible.

TikTok remains vigilant in our commitment to user safety, and to that end, a few months ago, we launched a global project to better understand young people's engagement with potentially harmful challenges and hoaxes. We have used the findings from the report to inform a review of our policies and processes, and we're making a number of improvements to build on our existing safeguards. More information is available in our Newsroom here: https://newsroom.tiktok.com/en-us/helpingour-community-stay-safe-while-having-fun-on-tiktok.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICK SCOTT TO MICHAEL BECKERMAN

Question 1. TikTok is owned by ByteDance, a Chinese conglomerate that has strategic partnerships with the Communist Chinese Ministry of Public Security, an agency of the Communist Party of China that is tasked with "public security," or more basically "mass surveillance" of their citizens. In 2017 the Communist Party of China enacted a law that requires any Chinese company to provide information or data upon request, which may include Americans' data collected by TikTok.

Does TikTok collect data on American citizens and house or route that data in

or through Communist China?

Answer. TikTok collects personal information from U.S. users in accordance with its Privacy Policy. All U.S. user data collected on the TikTok platform is stored on

servers located in the U.S., with backup data stored on servers in Singapore.

Some ByteDance entities provide services that support the operation of the TikTok platform, such as providing technical support services. To the extent that these support functions require ByteDance entities to access U.S. user data, such access is remote (as U.S. user data is stored in the U.S. and Singapore), and steps are taken to limit such access, including restrictions on who has access to which dataset, strong authentication measures, logging of access, limited access period, and encryption of data.

Does TikTok comply with all of Communist China's laws that require it to provide

data including data on American citizens?

Answer. The TikTok platform is not available in mainland China and is not the focus of the Chinese counter-espionage law, national security law, or national intelligence law. TikTok has never been asked or subpoenaed by the Chinese government to provide any U.S. user data, and the Chinese government has never asserted any legal rights over such data.

In 2019, the Washington Post ran an article about TikTok's censorship of "#hongkong". Does TikTok, at the request of the Communist Chinese government, censor American users' content, such as a post about the need for democracy in Hong Kong or a post condemning the treatment of the Uyghur Muslim population in China?

Answer. TikTok has established a U.S. Safety Team that is based in the U.S. and led by an American, which makes independent decisions regarding content moderation in the U.S. TikTok does not remove content based on sensitivities related to China. We have never been asked by the Chinese government to remove any content, and we would not do so if asked. One can find user generated content on TikTok addressing users' views of diverse subjects, including democracy in Hong Kong and the treatment of the Uyghur Muslim population in China.

Question 2. In July, the Wall Street Journal ran an investigation into TikTok's use of algorithms, which found that these algorithms collect massive amounts of data on each user and their interests, creating an echo chamber of videos that TikTok believes the user wants to see. TikTok will continue to feed the user more and more of related videos.

It appears that the common theme with most platforms is how you get a user to stay on your platform for as long as possible. I think everyone could agree that all social media platforms can become addictive. Do you believe the use of your algorithms are harmful to users, especially teenagers and children?

Does TikTok study the harmful impacts that using their platform has on different

demographics that use your platform?

If so, will you make that research public?

Answer. TikTok takes seriously our responsibility to help maintain a safe environment for our community, especially for teens. TikTok conducts research on a variety

of topics relating to safety and would be happy to discuss the findings with your

Question 3. It is pretty fair to assume that a large portion of the growth and revenue that your platforms bring in is centered on ensuring a growing youth user base. To keep growing as a platform, you likely need new young users, which in turn requires you to target younger demographics in outreach. Current Federal law prohibits platforms such as yours from collecting data on children under 13 years old. Companies like YouTube paid \$170 million to settle allegations by the FTC and the New York Attorney General for allegedly collecting personal information from children without their parents' consent.

What portion of your user base in the United States is under 18-years old?

Answer. TikTok disagrees with the premise of the question that TikTok is required "to target younger demographics." TikTok celebrates diversity and welcomes people of different ages, cultures, and backgrounds. We do not publicly share details on our user demographics.

Do you believe that provisions in the Children's Online Privacy Protection Act (COPPA), that require parental consent for collecting data on children under 13,

should be reviewed and possibly changed to increase the age limit?

Answer. We are supportive of an effective Children's Online Privacy Protection Act and would be happy to meet with your office to discuss any specific provisions or proposals.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. CYNTHIA LUMMIS TO MICHAEL BECKERMAN

Question 1. In response to my question regarding information that TikTok automatically collects on its users, you asserted that you collect less information than many of your peers, namely "Facebook and Instagram." Please identify the specific privacy policies, data collection practices, or security measures, that you have adopted which are less intrusive than your peers in this space, including, but not limited to, Facebook and Instagram.

Answer. At TikTok, we respect the privacy of our users and look to adhere to data minimization principles. For example, we do not require users to provide their real name in order to create an account. We also do not ask our users for personal background information, such as education, employment, or marital status.

Question 2. In our hearing you stated that you would follow up with my office, you have not. Will TikTok commit to giving my staff a privacy briefing?

Question 3. Your privacy policy states that you may share, "all of the information we collect with a parent, subsidiary, or other affiliate of our corporate group. ByteDance technology, or any other affiliate controlled in whole or in part by the Chinese Communist Party, receive directly or indirectly through commerce or otherwise, information collected about TikTok users outside of China?

Answer. ByteDance Ltd. is not, and does not have any affiliates, controlled in

whole or in part by the Chinese Communist Party.

Beijing ByteDance Technology Co., Ltd. is a separately held subsidiary under ByteDance Ltd. that is focused on the domestic China market. It has no ownership or control over TikTok, and no input into TikTok's operations. Further, employees of Beijing ByteDance Technology Co., Ltd. are restricted from accessing U.S. user

Question 4. Has your business conducted internal research, or contracted or collaborated with external entities to perform research examining, or which has revealed, various harms that can result from using your platform generally, or specifically as it relates to its use by minors? This harm definition should include deleterious effects to a user's social, mental, or physical well-being.

If so, will you commit to sharing that research with Members of Congress and/or appropriate outside professionals?

Answer. TikTok takes seriously our responsibility to help maintain a safe environment for our community, especially for teens. TikTok conducts research on a variety of topics relating to safety and would be happy to discuss the findings with your

Question 5. You stated in your testimony that length of engagement, or some variation of it, was one of many metrics that your company uses to measure your company's success. This necessarily implies the existence of other metrics that your company uses to define success. Please identify all of those specific metrics, how the specific metric is calculated and tracked on the platform, and how they might align with or relate to your company's specific mission.

Answer. There is no single metric or set of metrics that define TikTok's success. Depending on the objective, we may look at different metrics. For example, to help provide a safe, diverse, and entertaining experience on our platform, we consider a range of safety metrics (such as the account and content removals detailed in our Community Guideline Enforcement Reports) and engagement metrics (such as time spent, video views, and likes).

Response to Written Question Submitted by Hon. John Thune to Michael Beckerman

Question. TikTok's privacy policy states that "We may share all of the information we collect with a parent, subsidiary, or other affiliate of our corporate group." Please provide a complete list of all parent, subsidiary, or other affiliates with whom you share the information that you collect.

Answer. TikTok Inc. is a U.S. entity. Its parent company is TikTok LLC, which is owned by TikTok Ltd., which in turn is owned by ByteDance Ltd. TikTok entities within our corporate group include TikTok Pte. Ltd. (Singapore), TikTok Information Technologies UK Ltd. (UK), TikTok Technology Ltd. (Ireland), TikTok Technology Canada Inc. (Canada), TikTok Australia Pty. Ltd. (Australia), and TikTok Hong Kong Ltd. (Hong Kong), among others. In addition to these entities, affiliates under our Privacy Policy also include some non-TikTok entities under ByteDance Ltd. that provide services that support the operation of the TikTok platform, such as providing technical support services. To the extent that these support functions require ByteDance entities to access U.S. user data, such access is remote (as U.S. user data is stored in the U.S. and Singapore), and steps are taken to limit such access, including restrictions on who has access to which dataset, strong authentication measures, logging of access, limited access period, and encryption of data.

Response to Written Questions Submitted by Hon. Ted Cruz to Michael Beckerman

Question 1. Mr. Beckerman, in your testimony before the subcommittee, you acknowledged that ByteDance, the parent company of TikTok, is considered part of TikTok's "corporate group" as that term is used in TikTok's privacy policy. The relevant paragraphs of that policy are reproduced below:

How we share your information

We are committed to maintaining your trust, and while TikTok does not sell personal information to third parties, we want you to understand when and with whom we may share the information we collect for business purposes.

Within Our Corporate Group

We may share all of the information we collect with a parent, subsidiary, or other affiliate of our corporate group.

You would not, however, say whether Beijing ByteDance Technology, a sister company of TikTok, is included under the same "Within Our Corporate Group" paragraph, which outlines "How [TikTok] share[s] your information."

As I noted during the hearing, media reports from earlier this year showed the Chinese government took a minority stake in Beijing ByteDance Technology, doing so through the use of the state-backed "Internet Investment Chinese (Beijing) Technology" entity. Additionally, it was reported that as part of this deal a government official named "Wu Shugang" took one of three board seats at Beijing ByteDance Technology. According to those same reports, this government official, Wu Shugang, has spent most of his career in Chinese propaganda, including with a stint at the "online opinion bureau" under the Cyberspace Administration of China (CAC), China's Internet regulator.

Mr. Beckerman, I'll ask again in writing—is Beijing ByteDance Technology, which press reports have characterized as a subsidiary of ByteDance, TikTok's parent company, considered to be part of your "corporate group" as that term is used in TikTok's privacy policy? Please answer this question with a 'yes' or 'no'.

Answer. Beijing ByteDance Technology Co., Ltd. is a separately held subsidiary under ByteDance Ltd. that is focused on the domestic China market. It has no ownership or control over TikTok, and no input into TikTok's operations. Further, em-

ployees of Beijing ByteDance Technology Co., Ltd. are restricted from accessing U.S. user data.

Question 2. Mr. Beckerman, how many entities are in TikTok's "corporate group" as that term is used in TikTok's privacy policy, and what is their relationship to each other? Please provide an organizational chart illustrating these relationships if available.

Answer. TikTok Inc. is a U.S. entity. Its parent company is TikTok LLC, which is owned by TikTok Ltd., which in turn is owned by ByteDance Ltd. TikTok entities within our corporate group include TikTok Pte. Ltd. (Singapore), TikTok Information Technologies UK Ltd. (UK), TikTok Technology Ltd. (Ireland), TikTok Technology Canada Inc. (Canada), TikTok Australia Pty. Ltd. (Australia), and TikTok Hong Kong Ltd. (Hong Kong), among others. In addition to these entities, affiliates under our Privacy Policy also include some non-TikTok entities under ByteDance Ltd. that provide services that support the operation of the TikTok platform.

Question 3. Mr. Beckerman, please provide a definition for parent, subsidiary, other affiliate, and corporate group, as those terms are used in TikTok's privacy policy.

Answer. TikTok Inc. is a U.S. entity. Its parent company is TikTok LLC, which is owned by TikTok Ltd., which in turn is owned by ByteDance Ltd. TikTok entities within our corporate group include TikTok Pte. Ltd. (Singapore), TikTok Information Technologies UK Ltd. (UK), TikTok Technology Ltd. (Ireland), TikTok Technology Canada Inc. (Canada), TikTok Australia Pty. Ltd. (Australia), and TikTok Hong Kong Ltd. (Hong Kong), among others. In addition to these entities, affiliates under our Privacy Policy also include some non-TikTok entities under ByteDance Ltd. that provide services that support the operation of the TikTok platform.

Question 4. Mr. Beckerman, please provide the following:

- 1. The legal name of each "parent, subsidiary, or other affiliate" which is part of TikTok's "corporate group."
- 2. The location where each "parent, subsidiary, or other affiliate" is headquartered
- 3. The location where each "parent, subsidiary, or other affiliate" is domiciled, if domicile location differs from where the parent, subsidiary, or other affiliate is headquartered.
- 4. For each "parent, subsidiary, or other affiliate," the laws under which they were originally incorporated.
- 5. For each "parent, subsidiary, or other affiliate," the laws under which they currently operate, if different from the laws under which they were incorporated. If there are multiple jurisdictions, please list all that apply for each "parent, subsidiary, or other affiliate."
- 6. For each "parent, subsidiary, or other affiliate," the full names of the leadership of each "parent, subsidiary, or other affiliate," including the members of the board where applicable.
- 7. For each "parent, subsidiary, or other affiliate," the mix of capital backing the entity, including all state-owned banks or financing regimes, or state-backed banks or financing regimes, the names of those state-owned or state-backed banks and financing regimes, and the names of those nations.

Answer. TikTok Inc. is a U.S. entity. Its parent company is TikTok LLC, which is owned by TikTok Ltd., which in turn is owned by ByteDance Ltd. TikTok entities within our corporate group include TikTok Pte. Ltd. (Singapore), TikTok Information Technologies UK Ltd. (UK), TikTok Technology Ltd. (Ireland), TikTok Technology Canada Inc. (Canada), TikTok Australia Pty. Ltd. (Australia), and TikTok Hong Kong Ltd. (Hong Kong), among others. In addition to these entities, affiliates under our Privacy Policy also include some non-TikTok entities under ByteDance Ltd. that provide services that support the operation of the TikTok platform.

Question 5. Mr. Beckerman, also in TikTok's privacy policy is a paragraph titled "for legal reasons." The relevant text has been reproduced below:

How we share your information

We are committed to maintaining your trust, and while TikTok does not sell personal information to third parties, we want you to understand when and with whom we may share the information we collect for business purposes.

For Legal Reasons

We may disclose any of the information we collect to respond to subpoenas, court orders, legal process, law enforcement requests, legal claims, or government inquiries, and to protect and defend the rights, interests, safety, and security of TikTok Inc., the Platform, our affiliates, users, or the public. We may also share any of the information we collect to enforce any terms applicable to the Platform, to exercise or defend any legal claims, and comply with any applicable law

fend any legal claims, and comply with any applicable law.

Mr. Beckerman, please answer whether TikTok would consider demands made under the following to fall under the umbrella of "subpoenas, court orders, legal process, law enforcement requests, legal claims, or government inquiries" for which TikTok may "disclose any of the information [it] collect[s]":

- China's 2014 counter-espionage law, which allows Chinese authorities to seal or seize any property linked to activities deemed harmful to the country.
- China's 2015 national security law, which outlaws threats to China's government, sovereignty and national unity as well as its economy, society, and cyber and space interests.
- 3. China's 2017 national intelligence law, which obliges individuals, organizations, and institutions to assist Public Security and State Security officials in carrying out a wide array of "intelligence" work, and stipulates that "any organization or citizen shall support, assist, and cooperate with state intelligence work according to law."

Answer. The TikTok platform is not available in mainland China and is not the focus of the Chinese counter-espionage law, national security law, or national intelligence law. TikTok has never been asked or subpoenaed by the Chinese government to provide any U.S. user data, and the Chinese government has never asserted any legal rights over such data.

Question 6. Mr. Beckerman, as a subsidiary of ByteDance, would TikTok consider protecting ByteDance from government retribution, say by turning over data to the Chinese Communist Party, to be in defense of "the rights, interests, safety, and security of TikTok Inc., the Platform," or its "affiliates"?

Answer. The TikTok platform is not available in mainland China and is not the

Answer. The TikTok platform is not available in mainland China and is not the focus of the Chinese counter-espionage law, national security law, or national intelligence law. TikTok has never been asked or subpoenaed by the Chinese government to provide any U.S. user data, and the Chinese government has never asserted any legal rights over such data.

As a U.S.-based company, TikTok Inc. is committed to abiding by the laws to which it is subject. Any subpoenas, legal processes, and government inquiries would be evaluated by legal professionals on behalf of TikTok and responded to in accordance with applicable laws.

Question 7. Mr. Beckerman, is Beijing ByteDance Technology, considered to be one of TikTok's "affiliates" which, in defense of, TikTok could share "any of the information" it collects?

Answer. Beijing ByteDance Technology Co., Ltd. is a separately held subsidiary under ByteDance Ltd. that is focused on the domestic China market. It has no ownership or control over TikTok, and no input into TikTok's operations. Further, employees of Beijing ByteDance Technology Co., Ltd. are restricted from accessing U.S. user data.

Question 8. Mr. Beckerman, please list, in detail, the following for all "affiliates" which, in defense of, TikTok could share "any of the information" it collects:

- 1. The legal name.
- 2. The location where headquartered.
- 3. The location where domiciled.
- 4. The laws under which each was incorporated.
- 5. The laws under which each operate currently. If there are multiple jurisdictions, please list all that apply.

Answer. TikTok Inc. is a U.S. entity. Its parent company is TikTok LLC, which is owned by TikTok Ltd., which in turn is owned by ByteDance Ltd. TikTok entities within our corporate group include TikTok Pte. Ltd. (Singapore), TikTok Information Technologies UK Ltd. (UK), TikTok Technology Ltd. (Ireland), TikTok Technology Canada Inc. (Canada), TikTok Australia Pty. Ltd. (Australia), and TikTok Hong Kong Ltd. (Hong Kong), among others. In addition to these entities, affiliates under our Privacy Policy also include some non-TikTok entities under ByteDance Ltd. that provide services that support the operation of the TikTok platform, such as providing technical support services. To the extent that these support functions require ByteDance entities to access U.S. user data, such access is remote (as U.S. user data is stored in the U.S. and Singapore), and steps are taken to limit such

access, including restrictions on who has access to which dataset, strong authentication measures, logging of access, limited access period, and encryption of data.

Question 9. Mr. Beckerman, what product development is done solely in China? What product development is shared between Chinese employees and American employees, and what is the breakdown of how much of this shared product development is done in China vs. the United States?

Answer. The team members that work on product development and related features are located in the U.S., China, Singapore, and Europe. We are unable to provide a breakdown of how much development is done in China versus other countries where we do product development, and any such percentage would be constantly changing in any event, as we continue to hire more engineering talent. Our global approach towards product development is similar to the approach of other large global tech companies that likewise have product development or innovation teams in various global locations, including the U.S., China, India, and Europe.

Question 10. Of TikTok's employees in the United States, what number have ByteDance e-mail addresses and what percentage of the American workforce does that represent?

Answer. TikTok Inc. is a large, fast-growing company that is part of an even larger global organization in ByteDance Ltd. TikTok Inc. employees have ByteDance domain e-mails but can also choose to have a TikTok e-mail address, which some do. Using an e-mail domain that is tied to the top level entity is a common practice for large multinational organizations.

Question 11. What data do ByteDance employees in China have unrestricted access to?

Answer. ByteDance employees in China do not have unrestricted access to U.S. user data.

Question 12. What data is controlled by TikTok's "access controls"?

Answer. TikTok's data access approval policy, which sets out TikTok's data access controls and procedures, applies to all TikTok U.S. user data.

Question 13. Of the ByteDance employees in China who have access or have previously accessed TikTok data, how many of them are affiliated with, or have some kind of relationship with, the Chinese Communist Party? Please list, in detail, what those relationships are and what data these employees had or have access to.

Answer. TikTok Inc. does not have information about the status of the political affiliation of ByteDance employees in China, nor does TikTok Inc. have information about the political affiliation of employees of other ByteDance entities outside the U.S.

Question 14. Mr. Beckerman, it was reported in July of this year that TikTok's parent company, ByteDance, began licensing parts of its artificial intelligence (AI) technologies to third parties through a new division called BytePlus. According to this reporting, customers can pay "to use recommendation algorithms, real-time filters, and effects, automated translations, and computer vision tech, akin to what's found in TikTok . . ."

Mr. Beckerman, how does TikTok use AI in its algorithms, filters, and other parts of the platform?

Answer. TikTok uses AI in its recommendation system that powers the For You feed. Recommendation systems are common for entertainment and social media platforms like Netflix, YouTube, and Instagram. To learn more about TikTok's recommendation system, please see our Newsroom post for additional details: https://newsroom.tiktok.com/en-us/how-tiktok-recommends-videos-for-you. TikTok also uses AI-based technology for its Discover page, special effects, platform safety and content moderation, and data security tools.

ByteDance recently began offering recommendation technology through BytePlus, a new technology services subsidiary, but the recommendation technology provided by BytePlus is not the TikTok recommendation system, which has been highly customized and refined over time for the global TikTok business and user community.

Question 15. Of the technologies ByteDance is licensing through BytePlus, which of them are also technologies used by TikTok?

Please specify the technology being licensed through BytePlus, and how each is used by TikTok currently or was used previously.

Answer. TikTok's proprietary technologies underlying its recommendation system and special effects models are different from the technologies that are licensed through BytePlus.

Question 16. Of the technologies ByteDance is licensing through BytePlus, which of them are technologies developed, wholly or partially, by TikTok? Please specify

the technology being licensed through BytePlus, and what role TikTok played in the

development of that technology.

Answer. TikTok's proprietary technologies underlying its recommendation system and special effects models are different from the technologies that are licensed through BytePlus.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MIKE LEE TO MICHAEL BECKERMAN

Question 1. Mr. Beckerman, one of the main draws to TikTok is its fast paced, short videos and its "For You" page that suggests videos to its users. The WSJ published a recent article detailing how the "For You" page can send teens down rabbit holes full of explicit content, including sexual violence and drugs, even if they have only searched for explicit content once on the platform.

What changes, if any, have been made to the algorithm that controls the "For You" page since these findings?

Answer. At TikTok, safety and wellness—in particular for children and teens on our platform—is our priority. This has been the case long before the WSJ article. For children under 13 years old, TikTok offers TikTok for Younger Users, which is a limited experience where under 13 users can watch a curated library of safe and age-appropriate videos. With respect to teens, we work hard to provide families with the tools and features to make the content decisions that are right for them.

While we believe the WSJ study's use of bots to artificially create a simulated TikTok experience does not represent true user behavior or experience, we nevertheless take the issues raised in the WSJ article very seriously and are actively exploring ways, including development of new automated models, to address such issues

with respect to our younger users.

To learn more about TikTok's recommendation system, please see our Newsroom post for additional details: https://newsroom.tiktok.com/en-us/how-tiktok-recom mends-videos-for-you.

Question 2. How do you reconcile content that is typically banned by your platform being recommended to teens regularly through your algorithm?

Answer. TikTok disagrees with the characterization that it regularly recommends

to teens content that is typically banned.

TikTok's Community Guidelines define a set of norms and common code of conduct; they provide guidance on what is and is not allowed on TikTok in order to help create a welcoming and safe space for everyone. We publish quarterly Community Guideline Enforcement Reports that demonstrate that of all the content that users upload to TikTok, less than 1 percent of videos uploaded was found to violate the Community Guidelines. Additionally, of those videos, 93 percent were identified and removed within 24 hours of being posted.

Question 3. Does your platform permit "interest" specific ads to be targeted to children?

Answer. There are no ads in TikTok for Younger Users, which is a limited experience where under 13 users can watch videos curated for safety and age-appropriate-

Question 4. What interest related data does your platform collect from children's profiles?

Answer. It is unclear what is meant by "interest related data." TikTok for Younger Users collects a very limited set of data, including but not limited to "likes" and browsing history.

Question 5. Does your platform collect data on children that is for adult products—tobacco, alcohol, recreational drug use—or for sexually suggestive ads?

Answer. There are no ads in the TikTok for Younger Users experience. We note

that TikTok's Ads Policies applicable to the U.S. platform prohibit ads for tobacco, alcohol, and recreational drug use, as well as sexually suggestive ads.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO

Preventing Child Sexual Exploitation and Grooming. According to the National Center for Missing and Exploited Children (NCMEC), 2020 was record-breaking for reports of child sexual exploitation, and this year has already exceeded that number of reports. In November 2019, I led a bipartisan letter to you and other tech companies about what you are doing to stop child sexual exploitation.

Question 1. What technologies do you have in place to automatically monitor for the grooming and enticement of children and report these crimes swiftly? If none, please explain why not.

Question 2. What technologies do you have in place to detect and stop predators from inducing children to send explicit images, videos, or live-streams of themselves? If none, please explain why not.

Answer. Because the answers to these questions are related, we have grouped to-

gether our response to Questions Nos. 1 and 2.

YouTube's Approach. YouTube is committed to fighting online child sexual abuse and exploitation and preventing our services from being used to spread child sexual abuse material (CSAM). We invest heavily in fighting child sexual abuse and exploiabuse material (CSAM). We invest heavily in fighting ethic seath abuse and exportation online and use our proprietary technology to detect, remove, and report offenses on our platforms. We proactively detect and report illegal child sexual abuse material to the National Center for Missing and Exploited Children (NCMEC), and our Trust & Safety team works 24 hours a day to quickly respond to any child safety incident. We may terminate the accounts of those who are seeking to sexualize or exploit minors, and we report offenses involving CSAM to NCMEC, which liaises with global law enforcement agencies.

We identify and report CSAM with trained specialist teams and cutting-edge tech-

nology, including machine learning classifiers and hash-matching technology, which creates a "hash", or unique digital fingerprint, for an image or a video so it can be compared with hashes of known CSAM. In 2008, we began using these "hashes" to identify, remove, and report copies of known images. We also use our automated systems and human reviews to detect new CSAM and contribute new hashes to a hash database maintained by the NCMEC, helping to continue to grow the bank of

hashes of known CSAM.

In 2014, YouTube engineers created CSAI Match, world-leading technology that can be used to scan and identify uploaded videos that contain known child sexual abuse material. We make this technology available to other platforms and NGOs free-of-charge to help them identify matches against our database of known abusive regulations. In 2018, Google engineers created the Content Safety Application Programming Interface (API) which helps Google and other businesses and organizations prioritize potential abuse content for review. In the first half of 2021, our partners used the Content Safety API to classify over 6 billion images, helping them identify problematic content faster and with more precision so they can report it to the authorities.

In addition to our long-standing efforts to combat CSAM video, we have made large investments to detect and remove content which may not meet the legal defi-nition of CSAM, but where minors are still being sexualized or exploited. We have always had clear policies against videos, playlists, thumbnails and comments that sexualize or exploit children (more information is available at https://support.google.com/youtube/answer/2801999). We use machine learning systems to proactively detect violations of these policies and have human reviewers around the world who quickly remove violations detected by our systems or flagged by users and our trusted flaggers. Our machine learning systems help to proactively identify videos that may put minors at risk and apply our protections at scale, such as re-stricting live features, disabling comments, and limiting video recommendations. Identifying and removing videos more quickly—often before they have even been viewed—means children who are being sexually abused today are more likely to be identified and protected from further abuse.

Critical Partnership with NCMEC. YouTube reports all instances of CSAM on our platforms to NCMEC, who in turn may report the incident to law enforcement. Where there may be imminent harm to a child, our specialist team escalates the report to NCMEC's prioritization queue.

We provide NCMEC with detailed information about the user accounts associated

with the possession or distribution of CSAM. We are informed that inclusion of such information in our reports has been instrumental in allowing law enforcement to rescue children being victimized and ultimately bring those responsible to justice. When YouTube becomes aware of suspected grooming or the potential for hands-on abuse in connection with CSAM content, we include that information in a supplemental report to NCMEC with a high-priority status. When information within the report indicates that the information resolves to another country, NCMEC forwards the report to the appropriate law enforcement agency within that country.

NCMEC maintains a database of hashes—serving as digital fingerprints of identified CSAM content—that is made available to participating service providers so that content identified on one platform can be swiftly removed from all platforms. Google helped NCMEC redesign and rebuild the CyberTipline in 2011 to make the reporting system easier to use and established a Google Fellowship so that NCMEC can update the Cybertipline and integrate it with their Child Victim ID program, which

helps identify missing or exploited children.

Earlier this year, building on our industry-leading transparency initiatives, Google launched a transparency report (available at https://transparencyreport google.com/child-sexual-abuse-material/reporting?hl=en) specifically dedicated to detailing our efforts to combat online child sexual abuse material. From January through June 2021, these efforts included the submission of over 400,000 CyberTipline reports to NCMEC, involving over 3.4 million pieces of content. YouTube in particular contributed more than 124,000 CyberTipline reports and over 133,000 pieces of content to NCMEC.

Collaboration with NGOs. In addition to our work with NCMEC, we maintain strong partnerships with NGOs and industry coalitions to help grow and contribute to our joint understanding of the evolving nature of child sexual abuse and exploitation. For example, we are a leading member of the Technology Coalition (available at https://www.technologycoalitio n.org/), where child safety experts across the industry build capacity and help companies working to increase their capacity to detect ČSAM. The Tech Coalition announced research grants for five world-leading institutions (more information is available at https://www.end-violence.org/tech-coalition-safe-online-research-fund#grantees) who are working on actionable research including, for example, how to more detect online grooming. This is part of Project Protect—a cross-industry initiative to combat CSAM through investment, research, and information sharing (more information is available at https://www.technology coalition.org/2020/05/28/a-plan-to-combat-online-child-sexual-abuse/).

Question 3. Do you have specific mechanisms for users to report child sexual exploitation? If so, please elaborate on them; if not, please explain why not.

Answer. We want to protect children using our products from experiencing grooming, sextortion, trafficking and other forms of child sexual exploitation. In addition to the steps we take detailed in the answer above, we provide useful information to help users report child sexual abuse material to the relevant authorities. Users can flag inappropriate content on YouTube (available at https://www.form.google.com/ youtube/answer/2802027#report_channel&zippy=%2Creport-a-channel) if they discover content that may depict a child in danger or an abusive situation, by:

- Flagging the video: Report videos that contain inappropriate content involving minors by flagging the video for 'Child Abuse'; and
- Filing an abuse report: If a user has found multiple videos, comments, or a user's entire account that warrants reporting, the user should visit the reporting tool to submit a more detailed complaint.

We also provide information in our YouTube Community Guidelines (available at https://support.google.com/youtube/answer/2801999) and Google Safety Center (available at https://safety.google/families/) on how to deal with concerns about bullying and harassment, including information on how to block users from contacting a child. Google's Help Center (available at https://protectingchildren.google/ howtoreport/) also provides additional information for users on reporting and support for children who may be being abused, including contact information for the National Center for Missing and Exploited Children (NCMEC) and other helpful resources. Google's Protecting Children Site (available at https://protectingchildren.google/#fighting-abuse-on-our-own-platform-and-services) also provides information on how users can report inappropriate behavior towards children, including grooming and other forms of child sexual exploitation.

Question 4. Do you include IP addresses in all reports to NCMEC? If not, please

explain why not.

Answer. When we identify CSAM on our platforms, we make a "CyberTipline" report to NCMEC, as described in detail in the responses above. A single report may contain one or more pieces of content depending on the circumstances. This content could include, for example, images, videos, URL links, and/or text soliciting CSAM.

The reports sent to NCMEC may include information identifying the user, the minor victim, and/or other helpful contextual facts. We include both IP login information for the account and upload IP of the CSAM content if available in our reports to NCMEC.

Question 5. Please provide your policies and protocols on how you respond to law enforcement when they reach out for information relating to child sexual exploitation reports.

Answer. As noted above, we proactively look for and report illegal child sexual abuse material to the National Center for Missing and Exploited Children. Where there may be imminent harm to a child, our specialist team escalates the report to NCMEC's prioritization queue. From January through June 2021, these efforts included the submission of over 400,000 reports to NCMEC, involving over 3.4 million pieces of content.

Once a report is received by NCMEC, they may forward it to law enforcement agencies around the world. Law enforcement may then send legal process to YouTube seeking further information. In order to facilitate such requests, Google provides an online system that allows verified government agencies to securely submit valid requests for further information. These agencies can then view the status of submitted requests using this online system, and, ultimately, download Google's

response to their request.

We have a robust law enforcement response process with analysts and lawyers dedicated to ensuring that we appropriately respond to valid legal processes from law enforcement and make referrals to law enforcement when we identify problematic or illegal activity on our platform, including that relating to child safety. A law enforcement agency may ask YouTube to preserve specific information while the agency applies for valid legal process to compel the disclosure of that information. We have a dedicated team that responds to these requests, and in cases of emergencies, a team that works around the clock, every day of the year.

We describe our work and protocols concerning cooperation with law enforcement in our policies (available at https://policies.google.com/terms/information-requests) and our publicly available Transparency Reports (available at https://transparency

report.google.com/).

Advertising to Children and Teens. Your policies for advertisers on supervised accounts and child-directed content state "personalized ads, remarketing, and other personalized targeting features are prohibited on YouTube," and you testified that YouTube does not serve personalized ads or engage in personalized advertising in YouTube Kids and YouTube supervised experiences. However, YouTube does still allow advertising to teenage users and on child-directed content-and holds an extraordinary amount of information about those users. YouTube could itself target ads to users it believes are more likely to click on the ad, even if it doesn't allow advertisers to target certain audiences: for example, it could target a product to a teen because it thinks a teen of a certain gender or with certain interests is more likely to view the ad.

 $Question\ 6.$ Does YouTube itself do any targeting of advertising to teens or on child-directed content based on personal information? If so, please explain.

Question 7. Please list the factors that YouTube does consider for such targeting of advertising to teens and on child-directed content.

Answer. Because the answers to these questions are related, we have grouped to-

gether our response to Questions Nos. 6 and 7.

gether our response to Questions Nos. 6 and 7.

At the outset, we want to note that in August 2021, we announced that we'll be expanding safeguards to prevent age-sensitive ad categories from being shown to teens, and that we will block ad targeting based on the age, gender, or interests of people under 18. We'll start rolling out these updates across our products globally over the coming months (more information is available at https://blog.google/technology/families/giving-kids-and-teens-safer-experience-online/). This builds upon our existing prohibitions on personalized advertising for on YouTube Kids, within YouTube Supervised Experiences, and for users watching "Made for Kids" content on our YouTube service on our YouTube service.

To provide greater information on advertising, we initially adopted an advertisingsupported model because we wanted YouTube services to be available free of charge and accessible to all families, irrespective of their ability to pay. YouTube Kids provides guidance for third-party experts to create collections or works with influential individuals to provide content that supports academic or social-emotional learning. The educational and enriching content that results from such collaborations is ex-

pansive and diverse.

Creators are often small businesses who rely on ad revenue to invest in development of quality content; they receive a majority share of the advertising revenue. We are committed to fostering an appropriate viewing environment for children and families, and ensuring compliance with all applicable regulations and privacy commitments concerning ads and children. On YouTube Kids, within YouTube Supervised Experiences, and for users watching "Made for Kids" content on our YouTube service, we prohibit personalized advertising. In addition, for all users we prohibit ads with remarketing or other third-party tracking pixels from being shown to users on YouTube Kids, YouTube supervised accounts, and on "Made for Kids" content. Only contextual ads are eligible to serve to users on YouTube Kids, YouTube supervised accounts, and on "Made for Kids" content. Contextual advertising is based on the content of the underlying video that is being watched, whereas personalized advertising makes use of, for example, an individual user's previous activity or de-

mographic information in order to provide tailored ads.

We want to support a healthy digital advertising ecosystem—one that is trust-worthy and transparent, and works for users, advertisers, and publishers. Our Google Ads Policies are designed not only to abide by laws but to ensure a safe and positive experience for our users. We take strong enforcement action against advertising content that violates our policies for all of our users. We use a combination of manual and automated review to detect and remove ads that violate our policies. Our ads policies (available at https://support.google.com/adspolicy/answer/6008942?hl=en) cover four broad areas including prohibited content, prohibited practices, restricted content and features, and editorial and technical standards. These policies also prohibit advertising that includes content that promotes dangerous products or services, enables dishonest behavior, and includes inappropriate content like bul-

lying, intimidation, and self harm.

Further, to foster an appropriate viewing environment for children and families, all ads shown on YouTube Kids, against "Made for Kids" content, or to a user in an ads snown on YouTube Kids, against "Made for Kids" content, or to a user in our new supervised experience must comply with our kids advertising policies (available at https://support.google.com/google.com/google.com/google.com/youtube/answer/188570?topic=30084&ctx=topic). Under these policies, we prohibit paid ads that contain adult, dangerous, sexualized, or violent content. Our advertising policies also prohibit contests and sweepstakes, ads that mislead or make deceptive claims, ads that imply social status, and ads that refer to social media campaigns or websites. Ads that incite children to make a purchase, or urge their parents to buy the item are also prohibited. Ads for certain product categories are also prohibited. or websites. Ads that incite children to make a purchase, or arge their patents to buy the item are also prohibited. Ads for certain product categories are also prohibited, including: (i) regulated products, including alcohol, gambling, and pharmaceutical/healthcare as well as other products that may be dangerous to kids, such as fireworks or instructions to make harmful products; (ii) sensitive products that may be inappropriate for kids, such as those relating to dating, politics, and religion; and (iii) products that we have determined may not be appropriate for young audiences, including age-sensitive media content, beauty and fitness, dating and relationships, online or virtual communities, political ads, religious ads, and video games.

Across Google as a whole, our enforcement measures have allowed us to take down 3.1 billion ads worldwide for violating our ads policies in 2020—that's the removal of more than 5,900 bad ads per minute. We annually publish our ads safety report (available at https://services.google.com/fh/files/misc/ads_safety_report_2020.pdf; see also this blog at https://blog.google/products/ads-commerce/ads-safety-report-2020/), explaining enforcement actions we took against illegal and harmful advertising to protect users.

Question 8. Some creators, like influencers, make videos to push certain products to their users without employing traditional advertising mechanisms. You mentioned a set of "quality principles" to regulate the content in YouTube Kids. Please list these principles and elaborate on the types of commercial content that are and

are not in violation of these principles.

Answer. YouTube Kids prohibit paid ads that contain adult, dangerous, sexualized, or violent content. The YouTube Kids' ads policy also forbids contests and sweepstakes, as well as ads that mislead or make deceptive claims, ads that imply social status, and ads that refer to social media campaigns or websites. Ads that incite children to make a purchase, or urge their parents to buy the item, are also prohibited. Ads for certain product categories are also prohibited on YouTube Kids, including: (1) regulated products, including alcohol, gambling, and pharmaceutical/healthcare, as well as other products that may be dangerous to kids, such as reworks or instructions on how to make harmful products; (2) sensitive products that may be inappropriate for kids, such as those relating to dating, politics, and religion; and (3) products that we have determined may not be appropriate for young audiences, including age-sensitive media content, beauty and fitness, relation-

ships, online or virtual communities, political ads, religious ads, and video games. YouTube's quality principles (available at https://support.google.com/youtube/answer/1077 4223) for children and family content are designed to help guide YouTube's kids and family creator ecosystem. These principles were developed in collaboration with child development specialists, and are based on extensive research on children's media, digital learning, and citizenship. They are meant to give our creators a better idea of what may be considered low or high quality content, but the lists are not exhaustive. Additionally, these principles supplement our Community Guidelines (available at https://www.youtube.com/howyoutube works/policies/community-guidelines/#community-guidelines), which help provide a safe viewing experience for our users. Our creators are still responsible for following our Community Guidelines concerning any content they create. For ease of reference, our quality principles are as follows:

High quality principles

Age-appropriate, enriching, engaging, and inspiring content can come in different formats and cover a range of topics, but it should promote:

- Being a good person: This includes content that demonstrates or encourages respect, good behavior, and healthy habits. Examples include content about sharing, being a good friend, brushing teeth, eating vegetables, and setting digital wellbeing goals.
- Learning and inspiring curiosity: This includes content that promotes critical thinking, discussing connected ideas, and the discovery and exploration of the world. Content should be age appropriate and designed for a young audience. It can also span traditional to non-traditional learning (e.g., academics, informal learning, interest-based exploration, tutorials).
- Creativity, play, and a sense of imagination: This includes content that is thought-provoking or imaginative. It may also encourage kids to create, make, and engage with something in a meaningful and novel way. Examples include creating imaginary worlds, storytelling, soccer tricks, sing-alongs, and creative activities like art and crafts.
- Interaction with real world issues: This includes content that depicts life lessons and strong characters, or encourages building social-emotional skills, problem solving, and independent thinking. It often includes a complete narrative (e.g., character development, plot, resolution) and clear takeaway or lesson.
- Diversity, equity, and inclusion: This content celebrates and encourages representation and participation of diverse perspectives and groups of people. This includes content representing a range of ages, genders, races, religions, and sexual orientations. It also advocates for equal treatment of those differences. Examples include content that discusses the benefits of diversity and inclusion, or depicts stories/characters where these themes are demonstrated.

These principles help determine inclusion in YouTube Kids and how recommendations work in the main YouTube experience. On YouTube Kids, we identify and include videos and channels that are age-appropriate and adhere to the quality principles referenced above. We also use these principles to determine which high-quality content we raise up in our recommendations on YouTube. This means that when a user is watching "Made for Kids" content on YouTube, we aim to recommend videos that are age-appropriate, educational, and inspire creativity and imagination.

Low quality principles

We inform creators to avoid making low quality content. This includes content that is:

- Heavily commercial or promotional: Content that is primarily focused on purchasing products or promoting brands and logos (e.g., toys and food). It also includes content that is focused on excessive consumerism.
- Encouraging negative behaviors or attitudes: Content that encourages dangerous activities, wastefulness, bullying, dishonesty, or a lack of respect for others (e.g., dangerous/unsafe pranks, unhealthy eating habits).
- Deceptively educational: Content that claims to have educational value in its title or thumbnail, but actually lacks guidance or explanation, or is not relevant to children (e.g., titles or thumbnails that promise to help viewers "learn colors" or "learn numbers," but instead features mindless repetitive content or inaccurate information).
- *Hindering comprehension:* Content that is thoughtless, lacks a cohesive narrative, is incomprehensible (*e.g.*, has shaky visuals/inaudible audio), as is often the result of mass production or auto-generation.
- Sensational or misleading: Content that is untrue, exaggerated, bizarre, or opinion-based, and may confuse a young audience. It might also include "keyword stuffing", or the practice of using popular keywords of interest to children in a repetitive, altered, exaggerated, or nonsensical way.
- Strange use of children's characters: Content that puts popular children's characters (animated or live action) in objectionable situations.

We use these principles to reduce kids content that is low-quality (but that doesn't violate our Community Guidelines, available at https://support.google.com/youtube/answer/9288567) in our recommendations on YouTube, and remove channels from YouTube Kids. Examples of this content include videos that are heavily commercial or promotional, encourage negative behaviors or attitudes, and more. Our efforts are

ongoing and we regularly reevaluate and update these principles.

We recently shared additional monetization policies (available at https://sup-

We recently shared additional monetization policies (available at https://support.google.com/youtube/answer/1311392#kids-quality)—which align with the quality principles discussed above (and that are available at https://support.google.com/youtube/answer/10774223)—for channels that primarily create kids and family content on YouTube. Going forward, these principles will have not only an impact on recommendations and inclusion in YouTube Kids, but also on monetization.

Channels that primarily target young audiences or are classified as "Made for Kids" will need to deliver high-quality content and comply with kids-specific monetization policies. For example, channels that have predominantly low-quality kids content, such as "Heavily commercial or promotional" or "Encouraging negative behaviors or attitudes", may be suspended from the YouTube Partner Program. And if an individual video violates these quality principles, it may see limited or no ads. For more information about our quality principles, please see the guide available at https://storage.googleapis.com/support-kms-prod/kLTcocWcVNdo4YWcM9pHbLrXBKxtXaLrN2Wb.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. AMY KLOBUCHAR TO LESLIE MILLER

Preventing Unfair Competition. Streaming provider Roku says YouTube has made unfair demands in negotiations for carrying the YouTube TV app on Roku, including demanding Roku give preference to YouTube over other content providers in its search results and give YouTube access to non-public data from Roku's users. 1

Question. Did YouTube ask for non-public data or preferencing in search results at any point in negotiations with Roku or any other provider?

Answer. Our negotiations with Roku began earlier this year and we continue to work with them to find a resolution that benefits our mutual users. While we negotiate in good faith, we are providing Roku the ability to continue distributing both YouTube and YouTube TV apps to all existing users to make sure they are not impacted. We hope to resolve open commercial matters by the December 9, 2021 dead-

Our agreements to distribute YouTube include a certification process in which new devices need to meet our technical requirements. This process exists to provide a consistent and high-quality YouTube experience for users across different devices.

For distribution partners like Roku whose devices provide users with a universal search experience that aggregates results across multiple content providers, YouTube requires that search results from YouTube are included among the results from other content providers. This is because most living room users might know what they want to watch but not where they can or should watch it. Therefore we ask to be included as part of the search results. Partners have complete control on where to display the YouTube search results. Other content providers have similar requirements

What is different about YouTube—in contrast to other content providers—is that we have an incredibly expansive content library with 500 hours uploaded every minute. YouTube makes a public Application Programming Interface (API) available so that all partners, including Roku, can query that API when a user issues a search query. For distribution partners who don't have a universal search feature, we do not require them to display YouTube search results.

Social Media and Eating Disorders. Studies have found that eating disorders have one of the highest mortality rates of any mental illness.2

Question. Has YouTube conducted any research about how its apps may push content promoting eating disorders to teens? If so, please provide those studies.

Answer. YouTube doesn't permit content that glorifies eating disorders or encourages serious harm or death. And in fact, the first things you will see if you search on YouTube for issues related to suicide or eating disorders are prominent crisis resource panels boxes showing where to get help, such as the National Suicide Prevention Lifeline. Further, earlier this year we introduced new health source information

¹https://www.roku.com/blog/update-on-youtube-tv ²https://anad.org/get-informed/about-eating-disorders-statistics/

panels on videos to help viewers identify videos from authoritative sources, as well as adding health content shelves that more effectively highlight videos from these sources when a user searches for specific health topics, including topics like depression. For more information on these panels, please see https://blog.youtube/newsand-events/introducing-new-ways-help-you-find-answers-your-health-questions/

We have launched a number of programs to support children's mental health throughout 2020 and the COVID-19 pandemic including a meditation series (available at https://www.youtube.com/watch?v=J9nE4RE8uiQ) exclusively found on YouTube and YouTube Kids in partnership with Sesame St. and Headspace. We also recently partnered with experts including Mass General Brigham, National Alliance on Mental Illness, and the WHO to expand high quality content on topics such as depression, anxiety, substance use and recovery (more information is available at https://www.youtube.com/playlist?list=PLbpi6ZahtOH4MCLZywkbRXiHQ 4T40RrAD).

Advertising and Teenagers. YouTube earns revenue from showing ads.

Question 1. Please provide copies of the 100 most popular ads, in terms of viewership, among all users on your platform in the last year.

Answer. We are unable to provide the information requested at this time.

Question 2. Please also provide copies of the 100 most popular ads, in terms of viewership, among teenagers on your platform in the last year.

Answer. Similar to Question 1, above, we are unable to provide the information requested at this time.

Question 3. YouTube reported that its advertising revenue overall in the second quarter of 2021 was \$7 billion.3 How much of YouTube's U.S. revenue came from users under the age of 18?

Answer. YouTube does not calculate or report revenue on a per-user basis, nor demographic including age group.

Algorithms for Content Moderation. Frances Haugen disclosed that Facebook has been misleading the public about how well it can detect and remove harmful content.4 Facebook's internal documents estimated that their automated systems removed less than one percent of prohibited violent content."5

Question. Has YouTube collected any data about how often YouTube's automated content detection systems failed to capture content on YouTube that violates the company's terms of service in the last 18 months? If so, please provide that data.

Answer. We publish a quarterly Community Guidelines Enforcement report

 $(available\ at\ https://transparencyreport.google.com/youtube-policy/removals?hl=en).$ This report includes data on video, channel, and comment removals; appeals and reinstatements; human and machine flagging; and key topics including child safety. This year, we started releasing a new data point in our Community Guidelines Enforcement Report to provide even more transparency around the effectiveness of our systems: the Violative View Rate (VVR). That metric, which we now give quarterly, tells the world the percentage of views on YouTube that comes from content that violates our policies. We want to be open about that number and held accountable for driving it down.

In Q3 2021 alone, for example, we removed 6.2 million videos for violating our Community Guidelines. Approximately 72 percent of those first flagged by our systems received 10 or fewer views and approximately 95 percent were detected by our automated flagging system. In Q3 2021, the Violative View Rate was 0.09–0.11 percent (out of every 10K views on YouTube, only 9–11 come from violative content).

The VVR metric demonstrates that YouTube has invested significantly in our automated detection systems to identify violative content and our engineering teams continue to update and improve them month by month. We're constantly innovating to improve our machine learning and algorithms to identify content in violation of our policies. Among other AI principles, we believe AI should be socially beneficial, avoid creating or reinforcing unfair bias, and be accountable to people. We continue to be one of the leading companies investing heavily in responsible AI and implementation.

 $^{^3}https://abc.xyz/investor/static/pdf/2021Q2_alphabet_earnings_release.pdf \\ ^4https://www.wsj.com/articles/facebook-ai-enforce-rules-engineers-doubtful-artificial-intel-facebook-ai-en$

Children on Social Media. YouTube allows kids under 13 in the United States to use YouTube through YouTube Kids.6

Question. How many under 13 accounts has the company removed from YouTube—not YouTube Kids—in the last year?

Answer. Kids under 13 are not allowed to use YouTube, unless such use is enabled by a parent or legal guardian. When a user provides age information while creating a Google account, YouTube has access to that declared age information. We work hard to verify the ages of our users, requiring date of birth at sign-up and utilizing various signals in our network to confirm it.

YouTube also employs machine learning to identify signals on YouTube channels that may indicate that the account operating the channel may be owned by users under 13. We rely on signals to find these channels, and then flag for a team to review more closely and/or terminate the accounts when they appear owned by an underage user.

In the first three quarters of 2021, we terminated more than 7 million accounts when we learned they belonged to people under 13, with 3 million accounts termi-

nated in Q3 2021 alone.

Children's Privacy Online. In September 2019, the FTC settled with Google and YouTube for \$170 million after YouTube allegedly collected children's data without their parents' consent so that it could show them targeted ads.7 I'm still concerned YouTube is showing targeted ads to kids and teens.

Question. Do you ever use data collected on users who are not logged in for targeted advertising? If so, how can you be sure that none of those users are under

Answer. YouTube has invested significant resources to meet our obligations under our settlement with the FTC. As part of our compliance solution, we require all creators to tell us whether or not their videos are "Made for Kids." To help creators comply with this requirement, we allow creators to set their audience at the channel level, which will set all of their future and existing content as "Made for Kids" or not, or at the video level. We provide guidance to assist YouTube creators determine what content is "Made for Kids" in our help center (available at https://sup-port.google.com/youtube/answer/9528076?hl=en#zippy=%2Chow-do-i-know-if-ishould-set-my-content-as-made-for-kids) and include information released by the FTC (available at https://www.ftc.gov/news-events/blogs/business-blog/2019/11/youtube-channel-owners-your-content-directed-children). For example, we state that if a video includes actors, characters, activities, games, songs, stories, or other subject matter that reflect an intent to target children, it's likely made for kids. We provide clear communication to creators that a failure to set their content appropriately may result in consequences on YouTube and have legal consequences under COPPA and other laws.

When a creator's content is set as "Made for Kids" we limit data collection and use from every viewer of such content, regardless of whether they are logged in or not. This means we don't serve personalized ads on "Made for Kids" content. This also means we restrict or disable certain features like comments, notifications, and others. If a video or live stream is set as "Made for Kids" we disable features like autoplay on home, live chat, comments, save to playlist, channel memberships, amongst other features. Further, if a channel is set as "Made for Kids"—in addition to the features that are disabled as a result of a video being identified as "Made for Kids"—a creator's channel also won't have posts, stories, channel memberships, or the notification bell.

While we require creators to tell us whether or not their videos are "Made for Kids," we also use machine learning to help us identify videos that are clearly directed to young audiences. In cases of abuse or in which the creator has made an error we may override a creator's audience setting. If a creator has already set an audience for their video and YouTube detects error or abuse, the creator may see their video set as "Set to made for Kids." When this happens, the creator isn't able to change their audience setting. If a creator believes a mistake has been made they

can appeal the decision.

We have also taken significant additional measures that go beyond what is required under our settlement. For example, for many years we have continued to invest in helping creators understand how to make enriching, engaging and inspiring videos for kids and families. We recently announced our work to implement products

⁶See https://support.google.com/youtubekids/answer/7554914?hl=en&ref_topic=7554316#zip py=%2Cfirst-time-using-youtube-kids

7 https://www.ftc.gov/news-events/press-releases/2019/09/google-youtube-will-pay-record170-million-alleged-violations

and policies that help us connect families with high-quality content on YouTube and YouTube Kids (more information is available at https://blog.youtube/news-and-events/our-responsibility-approach-protecting-kids-and-families-youtube/). In collaboration with child development specialists, we established a set of quality principles (available at https://support.google.com/youtube/answer/10774223) to help guide our kids and family creator ecosystem. We use these principles to determine which high-quality content we raise up in our recommendations on YouTube. This means that when you're watching "Made for Kids" content on YouTube, we aim to recommend videos that are age-appropriate, educational, and inspire creativity and imagination.

Going forward, these principles will also have an impact on monetization. For example, channels that primarily target young audiences or are classified as "Made for Kids" will need to deliver high-quality content and comply with kids-specific monetization policies. In addition, channels that have predominantly low-quality kids content, such as "Heavily commercial or promotional" or "Encouraging negative behaviors or attitudes", may be suspended from our YouTube Partner Program. And if an individual video violates these quality principles, it may see limited or no ads. As noted above, in the first three quarters of 2021, we terminated more than 7

As noted above, in the first three quarters of 2021, we terminated more than 7 million accounts when we learned they belonged to people under 13, with 3 million accounts terminated in Q3 2021 alone.

Spanish Language Misinformation. In July, I led a letter with Senator Luján to social media companies including YouTube about misinformation in Spanish. Your response raised concerns about your content moderation efforts in non-English languages.

Question. In that letter, I asked how many employees or contractors YouTube has to moderate content in each of the top five languages spoken by U.S. users. You didn't answer that question. Please provide data on the number of content moderators you employ for the top five languages spoken by U.S. users.

didn't answer that question. Please provide data on the number of content moderators you employ for the top five languages spoken by U.S. users.

Answer. YouTube is a global platform with over 2 billion users in more than 100 countries speaking 80 different languages; responsibility is our top priority. To achieve our responsibility goals, YouTube removes content that violates our publicly available Community Guidelines. YouTube's Community Guidelines are enforced consistently across the globe, regardless of the language or location of where the content is uploaded.

Removing violative content: To enforce our Community Guidelines, we use a combination of machine learning and human reviewers, and have made significant investments in our systems to remove content that violates our Community Guidelines before it is widely viewed or viewed at all. Last year across Google, more than 20,000 people worked in a variety of roles to help enforce our policies and moderate content. These individuals are located across the globe, and possess a diverse set of backgrounds, including an array of linguistic capabilities and varied regional contexts.

In the first quarter of 2021, a majority of content removed from YouTube was from users outside of the United States. More specifically, of the top 30 countries with the highest number of content removed in Q1, 83.4 percent was removed outside of the United States. It's also important to note that English is not the primary language in 9 of the top 10 countries where the videos were removed. We disclose metrics on a quarterly basis in our Transparency Report (available at https://transparencyreport.google.com/).

Raising up authoritative information: YouTube also strives to provide context and raise authoritative information before and during viewer engagement. This is especially important in the case of topics that are prone to misinformation, such as COVID-19

A range of information panels on video watch pages and in search results are a key mechanism to provide users additional context from authoritative sources on such topics. For example, when a user in the U.S. enters a query or views a video related to COVID-19, we display an information panel that links to the Centers for Disease Control page with information about the pandemic.

In the U.S., these info panels are available in several different languages, including Spanish, French, and Chinese. Additionally, we work to prominently surface authoritative content in search results in a wide diversity of languages. For example, if a user searched for "COVID-19 vacuna," they'd receive authoritative content about the COVID-19 vaccine in Spanish. Millions of search queries are getting this treatment today.

⁸ https://www.lujan.senate.gov/wp-content/uploads/2021/09/YouTube-Response-Lujan.pdf

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARSHA BLACKBURN TO Leslie Miller

Question 1. Do you get parental consent when you do research on kids? Can you

provide a copy of a blank parental consent form, if applicable?

Answer. We care deeply about how families and children use technology and have engaged third parties to help us understand the challenges faced. Over the past several years, we have put together a group of leading experts on kids online safety, content quality, mental health, trauma, and child development to help us ensure that our product and policy decisions are up to date with the latest research in those fields.

As an example of our use of studies, in 2019, we commissioned Fluent Research to conduct a study (available at https://www.thinkwithgoogle.com/feature/digital-wellbeing-statistics/) to examine the role digital technology plays in the wellbeing of families and to help us understand how we could better support healthy tech habits through our products. This research was only conducted after individuals had explicitly provided us with their consent. This research, which included focus groups and survey responders in eleven countries, has informed our approach to product and policy design. The research also directly impacted our efforts to create experiences that help develop healthy tech habits, including the evolution of Family Link parental controls.

Other examples of our use of studies include third-party research as to what content is beneficial to children online, what content may be upsetting to kids, and how

young people use digital media to manage their mental health.

Question 2. During the hearing, you said you never spoke out against online privacy legislation.

Have you actually supported any specific bill?

Did the Internet Association advocate against online privacy legislation on your behalf?

Answer. We support comprehensive Federal privacy legislation, and we would welcome the opportunity to work with Congress on it. However, we are not waiting on Federal regulation to continue improvements to our privacy program. We are always working on new ways for users to protect their data, including by making our controls like auto-delete more robust and easier to use. We are also continuing to make advances in privacy enhancing technologies like differential privacy. Recently, we announced that YouTube will begin adjusting the default upload setting to the most private option available for teen users on YouTube and will also block ad targeting based on age, gender, or interests of users under 18.

As lawmakers debate new rules for the internet, citizens expect companies to engage in legislative debate openly and in ways that fully account for the concerns of all of society. We know we have a responsibility to take this understanding into our work on Internet policy, and consistently strive to do so. Google is a member of the Internet Association, a trade association that advocates on behalf of over 40 Internet technology companies; the Internet Association has also expressed support for comprehensive Federal privacy legislation, as seen here: https://internetassociation.org/

positions/privacy-security-safety/privacy/.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICK SCOTT TO LESLIE MILLER

Question 1. It is pretty fair to assume that a large portion of the growth and revenue that your platforms bring in is centered on ensuring a growing youth user base. To keep growing as a platform, you likely need new young users, which in turn requires you to target younger demographics in outreach. Current Federal law prohibits platforms such as yours from collecting data on children under 13 years old. Companies like YouTube paid \$170 million to settle allegations by the FTC and the New York Attorney General for allegedly collecting personal information from children without their parents' consent.

What portion of your user base in the United States is under 18-years old?

Do you believe that provisions in the Children's Online Privacy Protection Act (COPPA), that require parental consent for collecting data on children under 13, should be reviewed and possibly changed to increase the age limit?

Answer. YouTube has invested significant resources to meet our obligations under our settlement with the FTC. As part of our compliance solution, we require all creators to tell us whether or not their videos are "Made for Kids." We provide clear communication to creators that a failure to set their content appropriately may result in consequences on YouTube and have legal consequences under COPPA and other laws. In addition to prohibiting personalized ads on YouTube Kids, on our main platform, content that is made for kids does not run personalized ads and has certain features disabled, like comments and notifications.

YouTube also employs machine learning to identify signals on YouTube channels that indicate that the account operating the channel may be owned by users under 13. We rely on signals to find these channels, and then flag for a team to review more closely and/or terminate the accounts when they appear owned by an underage user. In the first three quarters of 2021, we terminated more than 7 million accounts when we learned they belonged to people under 13, with 3 million accounts terminated in Q3 2021 alone.

There are many legitimate reasons that 13–16 year olds should be able to access services to exercise age-appropriate rights to expression and access to information. We're committed to constantly making these services safer for teens, including expanding our age-restrictions so that users coming to YouTube must be signed-in and their account age must be 18 or older in order to view mature content. If they aren't, they see a warning and are redirected to find other content that is age-appropriate. Our Community Guidelines (available at https://www.youtube.com/howyoutubeworks/policies/community-guidelines/) include guidance to uploaders about when content should be age-restricted. Recently we announced further changes to Google Accounts for people under 18 (more information is available at https://blog.google/technology/families/giving-kids-and-teens-safer-experience-online/). For example, on YouTube we are changing the default upload setting to the most private option available for teens ages 13–17. We also are turning location history, a Google account setting, off for users under the age of 18 (without the ability to turn it on). Finally, as referenced above we are expanding safeguards to prevent age-sensitive ad categories from being shown to teens, and we will block ad targeting based on the age, gender, or interests of people under 18.

Response to Written Questions Submitted by Hon. Cynthia Lummis to Leslie Miller

Question 1. Has your business conducted internal research, or contracted or collaborated with external entities to perform research examining, or which has revealed, various harms that can result from using your platform generally, or specifically as it relates to its use by minors? This harm definition should include deleterious effects to a user's social, mental, or physical well-being. If so, will you commit to sharing that research with Members of Congress and/or appropriate outside professionals?

Answer. We care deeply about how families and children use technology and have engaged third parties to help us understand the challenges faced. Over the past several years, we have put together a group of leading experts on kids online safety, content quality, mental health, trauma, and child development to help us ensure that our product and policy decisions are up to date with the latest research in those fields.

As an example of our use of studies, in 2019, we commissioned Fluent Research to conduct a study to examine the role digital technology plays in the wellbeing of families and to help us understand how we could better support healthy tech habits through our products (more information on the study is available at https://www.thinkwithgoogle.com/feature/digital-wellbeing-statistics/). This research, which included focus groups and survey responders in eleven countries, has informed our approach to product and policy design. The research directly impacted our efforts to create experiences that help develop healthy tech habits, including the evolution of Family Link parental controls.

Other examples of our use of studies include third-party research as to what content is beneficial to children online, what content may be upsetting to kids, and how young people use digital media to manage their mental health. We have also seen recent studies—from Pew Research (available at https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/) and Common Sense Media (available at <a href="https://www.commonsensemedia.org/research/coping-with-covid19-how-young-people-use-digital-media-to-manage-their-mental-health)—that have highlighted that digital media use can help teens communicate with peers and family, seek helpful resources if they are experiencing distress, and find opportunities for learning and entertainment that can help combat isolation.

We also recognize that protecting children from abuse is a mission that no one company, industry, or part of society can accomplish alone. We also partner with others through the Technology Coalition (available at https://www.technologycoalition.org/)—an organization made up of 24 members representing different

parts of the industry. Through the Technology Coalition we work with stakeholders around the world to help advance cutting-edge research, technology innovation, and sharing of knowledge and best practice on how to prevent, detect and report child sexual abuse and exploitation. The Tech Coalition recently announced the funding of five global research projects to help increase our understanding and awareness of how to use artificial intelligence to combat child sexual exploitation at scale (more information is available at https://www.technologycoalition.org/2021/09/23/techcoalition-safe-online-research-fund-announces-awardees/).

Question 2. You stated in your testimony that length of engagement, or some variation of it, was one of many metrics that your company uses to measure your company's success. This necessarily implies the existence of other metrics that your company uses to define success. Please identify all of those specific metrics, how the specific metric is calculated and tracked on the platform, and how they might align with or relate to your company's specific mission.

Answer. YouTube's platforms are designed to allow users to search and discover all types of content and have an enjoyable experience. In response to your specific question, I stated that we look at various types of data points to inform us about whether a user is enjoying a piece of content, including if a video is watched through its entirety. To be clear, a user's watchtime is not used as a metric to define corporate success. In 2012, we incorporated watchtime into our recommendations systems (additional information available at https://blog.youtube/inside-youtube/on-youtubes-recommendation-system/) to help people find the videos they want to watch and that will give them value. Recommendations play a pivotal role across our entire community, introducing viewers to content they love and helping creators connect with new audiences. Recommendations also play an important role in how we maintain a responsible platform connecting viewers to high quality information

Response to Written Questions Submitted by Hon. John Thune to Leslie Miller

and minimizing the chances they'll see problematic content.

Question 1. What percentage of YouTube video views in the United States and worldwide are the result of an algorithm" used by YouTube suggesting or playing another video after the user finishes watching a video? Are the algorithms used by YouTube designed to display content that seeks to optimize user engagement?

Answer. Our recommendation system is built on the simple principle of helping people find the videos they want to watch and that will give them value. Users come to YouTube for video content that will help them learn something, be entertained, listen to music, or get the latest from a favorite creator. Our users get exposure to a wide diversity of content, andour recommendations system helps users discover this new and diverse content. When our recommendations are at their best, they connect billions of people around the world to content that uniquely inspires, teaches, and entertains.

es, and entertains.

The success of YouTube's recommendations depends on accurately predicting the videos viewers want to watch. Today, recommendations do drive a majority of the overall watchtime on YouTube, but the precise percentage of watchtime that comes from recommendations fluctuates.

Our system doesn't follow a set formula, but develops dynamically as user viewing habits change. A number of signals build on each other to help inform our system about what users find satisfying: clicks, watchtime, survey responses, sharing, likes, and dislikes. We also know not everyone wants to always share this information with us. So we've built controls that help users decide how much data they want to provide. Users can pause, edit, or delete their YouTube search and watch history whenever they want.

Over the years, a growing number of viewers have also started to come to YouTube for news and information. Recommendations also play an important role in how we maintain a responsible platform. We have built our systems to connect viewers to high-quality information and minimize the chances they'll see problematic content. And they complement the work done by our robust Community Guidelines that define what is and isn't allowed on YouTube. For example, we know that consumption of borderline content as a result of recommendations is significantly below 1 percent, and our goal is to have views of borderline content from recommendations below 0.5 percent of overall views on YouTube. You can learn more about our YouTube's recommendations system at https://blog.youtube/inside-youtube/on-youtubes-recommendation-system/.

Recommendations also help us connect viewers watching "Made for Kids" content to videos that are age-appropriate, educational, and inspire creativity and imagina-

tion, in line with our quality principles for kids and family content. More information about the set of quality principles we developed to help guide YouTube's kids and family creator ecosystem is available at https://support.google.com/youtube/answer | 10774223.

Question 2. YouTube Kids was created to provide younger users a more family-friendly experience, but YouTube Kids still shows ads to children. Given all the products and services owned and operated under Alphabet, Inc., in your view, is it necessary for YouTube to put ads on YouTube Kids?

Answer. To ensure YouTube Kids is available free of charge and accessible to all

consumers, we adopted an advertising-supported model.

We offer our services for free for users, and the revenue from ads is a key part of what allows us to sustain a vibrant community of content creators. We are committed to fostering an appropriate viewing environment for children and families. In 2015, we created YouTube Kids from the ground up with kids in mind. To ensure that the app could remain free while also offering a kid-friendly environment, we designed and implemented strict policies specifically for advertising that appears in YouTube Kids. Creators are often small businesses who rely on advertising revenue to invest in development of quality content and they receive a majority share of the advertising revenue. To ensure that the app could remain free while also offering a kid-friendly environment, we designed and implemented strict policies specifically for advertising that appears in YouTube Kids (more information is available at https://support.google.com/youtube/answer/6168681?hl=en).

Three core principles underlie the YouTube Kids' ads policies: (1) maintain an ap-

propriate viewing environment for children and families; (2) prohibit personalized advertising or third-party tracking or data collection in the app; and (3) permit only advertisement formats that maintain a closed environment that we can monitor and control. We prohibit paid ads on YouTube Kids unless they meet these require-

ments. We also have never allowed any personalized ads on YouTube Kids.

Our ads policy team, who is specifically trained on the YouTube Kids' ads policy (available at https://support.google.com/youtube/answer/6168681), reviews each ad before it appears on YouTube Kids. Only ads that pass this review are eligible to be served in YouTube Kids, and we prohibit paid ads that contain adult, dangerous, sexualized, or violent content. The YouTube Kids' ads policy also forbids contests and sweepstakes, as well as ads that mislead or make deceptive claims, ads that imply social status, and ads that refer to social media campaigns or websites. Ads that incite children to make a purchase, or urge their parents to buy the item, are also prohibited. Ads for certain product categories are also prohibited on YouTube Kids, including: (1) regulated products, including alcohol, gambling, and pharmaceutical/healthcare, as well as other products that may be dangerous to kids, such as reworks or instructions on how to make harmful products; (2) sensitive products that may be inappropriate for kids, such as those relating to dating, politics, and religion; and (3) products that we have determined may not be appropriate for young audiences, including age-sensitive media content, beauty and fitness, relationships, online or virtual communities, political ads, religious ads, and video games.

We require all ads to be clearly branded by the advertiser and/or product marketed in the video and the ads must be distinctive so that users can readily distinguish ads from general content. To reinforce the separation between paid ads and other content on YouTube Kids, a three-second ad "bumper" introduction appears at the start of every advertisement shown on YouTube Kids.

YouTube Kids prohibits any personalized advertising or retargeting/remarketing

campaigns from being shown in the app. Only contextual ads are permitted. YouTube Kids also prohibits any collection of data for personalized advertising or retargeting. YouTube Kids does not contain any plug-ins or social widgets that would allow users to interact with a third-party site or service such as Facebook or Twitter, and it does not allow third-party ad networks to serve ads within the

We have also adopted several policies with respect to creator videos that contain commercial content within YouTube Kids. For example, we require content creators to indicate whether their videos include any paid product placements or endorsements during the upload process. We do not allow any videos with such declared paid product placements from being shown anywhere on YouTube Kids. Our Help Center notifies creators that they are required to follow relevant local laws and must declare that their content includes paid promotion if they have received payment or goods in exchange for their video. We've also started to remove overly commercial content from YouTube Kids, such as a video that only focuses on product packaging or directly encourages children to spend money (more information is available at https://support.google.com/youtube/answer/10938174).

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MIKE LEE TO Leslie Miller

Question 1. During the hearing I asked the following:

Google Play has the app rating at Teen, meaning 13+, while the Apple Store has it rated at 17+. Why is there is a disparity in the age ratings between Apple and Google for YouTube? And if Apple determined that the age rating should be 17+, why did Google determine that its own app should be set as Teen?

At the time you said you were not sure how these decisions were made, but that you would follow up. Now that you've had a chance to review, can you explain why there is a disparity in the age rating between Google Play and the Apple Store?

Have you advocated for your app rating to be increased on Google or decreased

on Apple?

Answer. Google Play strives to provide a positive, safe, and fun environment for children and families. We empower parents to set healthy digital ground rules with Family Link parental controls and special Google accounts for kids (more information is available at https://families.google.com/familylink/; also see https://families/answer/7103338?hl=en). We also have developer policies in place with regard to apps that are primarily or in some cases partly directed to children the stription of the stription dren (for additional information, please see https://support.google.com/google play/android-developer/answer/9893335?hl=en&ref_topic=9877766).

App and games ratings are provided on Google Play in order to help parents understand the maturity of the content available to users, including whether the content may include sexual content, violence, drugs, gambling and/or profane language (for additional information, please see https://support.google.com/googleplay/answer/6209544). Parents and users can tap "Read More" within an apps details page in order to see a description of why the app got a particular rating, including wheth-

er the app has interactive features.

We approach age ratings and related restrictions from two angles—First, the Google Play store incorporates content ratings from the International Age Rating Coalition (IARC) (more information is available at https://www.globalratings.com/), which are designed to help developers communicate locally relevant content ratings to users in the jurisdictions where they live. We use IARC because we know that people in different countries have different ideas about what's appropriate when it comes to content for kids, teens, or adults. These ratings are also used to aid parental blocking—a parent can filter or block apps for their children by not showing mature rated apps to kids. They can achieve this using device settings or the Family Link app. Second, we also require developers to abide by certain policies (available at https://support.google.com/googleplay/android-developer/topic/98580 52?hl=en) based on the target audience of their apps. This is based in part on developers' self-reported target audience and, in part, on our review of the app. In terms of enforcement, Google promptly investigates both internal and third-party flagging of apps for potential violations of the Play policies, to determine what steps need to be taken. We encourage the Committee to contact the IARC for more information about the rating issue identified.

Question 2. Does your platform permit "interest" specific ads to be targeted to children?

Answer. On YouTube Kids, YouTube's supervised experience, and on our main YouTube platform for users watching "Made for Kids" content, we prohibit personalized advertising.

We are especially careful with ads that are shown in these contexts, ensuring that certain categories of ads, such as for alcohol or drugs, tobacco, or food and beverages are never shown on YouTube Kids, supervised experiences on YouTube, or those watching "Made for Kids" content, regardless of age.

Only contextual ads (not personalized ads) are eligible to serve to users of YouTube Kids, supervised accounts on YouTube main and on "Made for Kids" content. Contextual advertising is based on the content of the underlying video that is being watched, whereas personalized advertising makes use of, for example, an individual user's activity or demographic information in order to provide tailored ads.

In August, we announced that we'll be expanding safeguards to prevent age-sensitive ad categories from being shown to teens, and that we will block ad targeting based on the age, gender, or interests of people under 18 (more information is available at <a href="https://blog.google/technology/families/giving-kids-and-teens-safer-experi-e ence-online/). We'll start rolling out these updates across our products globally over the coming months.

Question 3. What interest related data does your platform collect from children's profiles?

Question 4. Does your platform collect data on children that is for adult products—tobacco, alcohol, recreational drug use—or for sexually suggestive ads?

Answer. Because the answers to these questions are related, we have grouped to-

gether our response to Questions Nos. 3 and 4.

As a general matter, we only collect the minimum amount of data necessary to make the YouTube Kids experience engaging and age appropriate, and we never collect personal information like name, address, or contact information from kids. We adhere to our obligations under COPPA concerning data collection and storage.

YouTube Kids also does not allow kids to share their personal information with third parties or make it publicly available. As detailed in the YouTube Kids privacy notice (available at https://kids.youtube.com/t/privacynotice), we do collect information about the devices used to access the service, and app usage information such as preferred language. We also collect information on app activity like search terms and videos watched, in order to offer content that is likely to be of interest to them. If parents decide to sign into YouTube Kids with their Google Account, the App will also collect profile information for any profiles they create for their children, as well

were as their parental controls and customization preferences.

We believe that products should keep user information for only as long as it's useful and helpful to the user—including for things like getting recommendations for what to watch on YouTube. That's why last year we introduced auto-delete controls (available at https://www.blog.google/technology/safety-security/automatically-de-lete-data/), which give users the choice to have Google automatically and continuously delete their Location History, search, voice, and YouTube activity data after 3 months or 18 months. We continue to challenge ourselves to do more with less data, and we've recently changed our data retention practices to make auto-delete the default for our core activity settings (available at https://myaccount.google.com/ data-and-personalization).

As noted in our response to Question 2, we do not personalize ads for users declared to be under 18, and we are especially careful with ads that are shown in these contexts, ensuring that certain categories of ads, such as for alcohol or drugs, tobacco, or food and beverages are never shown on YouTube Kids, Supervised Experiences, declared under 18 users or those watching "Made for Kids" content, regard-

less of age.

 \bigcirc