Reviewing the Enforcement of App Age Ratings in Apple’s App Store and Google Play
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Glossary

**App age rating:** A description of an app’s content and an age category for whom the app’s content is generally suitable as displayed through the mobile app store(s). The term used in Google Play is “content ratings.”

**Chatroulette-style apps:** Used to describe any type of app that randomly pairs strangers for video chats.

**Child(ren):** C3P uses this term in this document to refer to a person under 13 years of age. In material that we quote from other sources, however, “child” may have a different meaning, such as any person who is under 18 years of age.

**Content descriptor:** Additional information displayed through the mobile app store in conjunction with the app age rating that suggests why an app has received the app age rating.

**Content browse settings:** On Google Play, the parental control settings used to determine what apps are visible in search results for a child user, based on the selected age rating (i.e., Everyone, Everyone 10+, Teen, Mature 17+, Adults only 18+ or Allow all, including unrated).

**Enforcement of app age ratings:** When a mobile app store ensures that a user can only download apps rated for their age.

**Mobile app store(s):** Although other mobile app stores exist, we use this term to generally refer to both the Apple’s® App Store® and/or Google Play®.

**Terms of service:** The terms imposed on users of the app that are accessible either from within the app or from the corresponding website for the app.

**Youth:** C3P uses this term in this document to refer to a person between 13–17 years old.
EXECUTIVE SUMMARY

Apps and the internet offer a largely unrestricted space where children, youth, and adults are able to interact without the safeguards that exist offline. The Canadian Centre for Child Protection Inc. (C3P) has seen how the failure of governments to regulate online protections, and of industry to implement meaningful safeguards, has resulted in countless children and youth being sexually harmed on apps they have access to every day. In this report C3P set out to examine if Apple and Google—two of the biggest mobile app store operators—are living up to their stated commitments to protect children and youth using their services.

Apple and Google have made public claims that would lead parents to believe their app stores are safe for young users. One of Apple's taglines is, “The App Store. A Safe Place for Kids,” while Google Play states, “We help you manage what's right for your family online.” Yet, as this report demonstrates, such claims provide parents with a false sense of safety: Apple is failing to prevent youth from downloading age inappropriate apps on its App Store despite their public commitment, and, though recent changes reflect an improvement for Google, there are still areas that require changes on Google Play to help keep children safe.

This report’s main objective was to investigate the extent to which Apple's App Store and Google Play enforce app age ratings for two groups of users: children under the age of 13, and youth aged 13 to 17. To evaluate the enforcement, C3P analysts created multiple user testing accounts for both age groups on the Canadian version of both mobile app stores. On Google Play, this included testing each content browse setting for 11-year-olds, which can be changed by a parent during account set up. C3P analysts then attempted to download 18 apps using test accounts set up by C3P for an 11-year-old and a 13-year-old within each mobile app store. C3P analysts’ research led to many concerning findings in both mobile app stores, most notably, inconsistency in enforcement, lack of consistency in age ratings across both stores (and the app's actual terms of service), and promoted apps being shown to children and youth that are rated older than the age associated with the user's account. C3P analysts also noted a lack of any meaningful information in how age ratings are determined.

Apple and Google have publicly committed to countering online child sexual exploitation and abuse. One way they could work toward fulfilling this commitment is to enforce their own app age ratings. Using the birthdate associated with each user’s account, the mobile app stores could ensure users can only download and view apps that are rated as suitable for their age group. This would also mean that children and youth could not request parental consent to download an app rated for older users—just as parents cannot give consent for their underage children to access offline spaces intended for adults, such as bars or strip clubs. Enforcing app age ratings at the mobile app store level would increase protection for children and youth and ensure companies are shouldering their share of responsibilities for online safety instead of leaving it, unreasonably and entirely in the hands of parents.

Recent changes by Google Play have resulted in better enforcement of app age ratings for youth, however the fact is that these enforcement mechanisms are extraordinarily easy to bypass. From what we observed, it appears Apple’s App Store is largely not enforcing its own app age ratings for youth users.

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2 Google. (n.d.). We help you manage what's right for your family online. https://safety.google/families/
4 C3P observed that these changes occurred sometime between mid-October 2021 and late January 2022.
Additionally, the app age ratings themselves can provide a false sense of security. While they would seem on the surface to provide parents information on the overall safety of the app, it appears they relate only to the expected content in the app, the accuracy of which does not appear to be verified up front or monitored thereafter by the mobile app stores. From what we have observed, both Apple® and Google® place the decision about if a child can download an app on the parent, but do not always provide accurate, current information about the app itself, and in some instances the app age rating and content descriptors can be misleading.

As a result, we believe these mobile app stores are not living up to their stated commitments to keeping young users safe; the stores do a disservice to children, youth, and their parents by making it their responsibility to make safety and protection decisions while simultaneously failing to provide relevant, accurate and current information about the apps.

Main findings included:

- **Inconsistent enforcement of app age ratings.**
  
  When C3P analysts were using testing accounts for an 11-year-old on Apple's App Store or Google Play, they **could not download** apps rated 12+/Teen or older without permission from a parent account. However, when C3P analysts searched for apps rated for older users (whether as an 11-year-old using Google Play’s default content browse settings or having bypassed the restrictions as a 13-year-old, or on Apple’s App Store with both an 11 or 13 year old’s testing account) they **could see the apps in search results** with older age ratings. The 11-year-old testing accounts could then request parental permission to download apps rated for older users.

  Though these mobile app stores offered some protections for children, only Google Play enforced app age ratings for youth, and only recently, restricting their access to apps rated Teen or younger. However, through a simple Google search we found instructions readily available online (including on a Google Play’s Help page) that explained how to bypass the restrictions on Google Play. After following those instructions, our 13 year old’s testing account immediately had access to all apps we tested that are rated Mature 17+.

  For Apple’s App store, C3P analysts’ tests found that a 13-year-old user could download 17+ rated apps by simply clicking a pop up “confirming” they were 17 years or older, despite Apple already knowing the account was setup as a 13-year-old. This included adult dating, kink, and chatroulette-style apps.

- **Apple’s App Store and Google Play promoted apps to 11 and 13 year old’s testing accounts that were rated above the age associated with the account.**

  When C3P analysts searched for apps in both mobile app stores as an 11-year-old, apps rated for older users were displayed. Most notably, on Apple’s App Store children and youth accounts promoted apps clearly intended for adult audiences, including dating, hookup, and kink apps.

- **App age ratings varied between Apple’s App Store, Google Play, and the app’s terms of service.**

  For example, YouTube® is rated 17+ on Apple’s App Store but Teen on Google Play, and 13+ in YouTube’s own terms of service. If both stores were to enforce these age ratings, youth could download YouTube on Google Play four years earlier than their peers using Apple’s App Store.

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5 With the exception of an 11-year-old’s testing account on Google Play where the default browse visibility settings were changed to Everyone 10+. See page 17 for additional information.
Both mobile app stores lacked transparency in how they establish app age ratings.

It appears that both stores rely on app developers to answer brief questionnaires about the app’s content and then use those answers to help determine the app’s age rating in that store. We found them to be vague, short, and confusing. It is unclear if any other steps are taken or criteria used, and how the stores use the information provided to determine an app’s age rating.

Chatroulette-style apps were widely available on Apple’s App Store and accessible on Google Play if youth bypassed restrictions.

Chatroulette-style apps randomly pair strangers for video chats. Although these apps are notoriously used for sexual content and Apple says they’ve made them subject to removal from their store, chatroulette-style apps were readily available for download by users 13–17 years old. If a youth took simple steps to bypass restrictions on Google Play, they were also able to download these apps.

Children and youth should be protected online just as they are offline. These findings point to major gaps in online protection, particularly for youth. C3P therefore recommends the following, either as voluntary actions taken by Apple’s App Store and Google Play, or as policies set by a regulatory framework from governments.

Recommendations:

1. **Provide transparent information on how app age rating criteria are reached and monitored.**

   By transparently disclosing how app age ratings are determined and making this information publicly available, third parties can hold Apple’s App Store and Google Play to account for the app age ratings they assign. This will allow parents to make more informed decisions when determining whether they are comfortable with their child or youth using an app with the understanding of how they were determined to be developmentally appropriate. The mobile app stores should verify the accuracy of the information provided by the app developer at the time the app age rating is determined, and periodically thereafter.

2. **Enforce age ratings listed in mobile app stores.**

   Just as children and youth cannot access some offline spaces meant for adults, such as bars and strip clubs, they should not be able to download apps rated for older users at all. Apple’s App Store and Google Play should stop putting the onus on parents, and remove options for parental consent to download apps rated for older users—including, but not limited to, chatroulette-style apps. At minimum, Apple’s App Store and Google Play could accomplish this by using the age associated with the user’s account to determine what apps can and cannot be downloaded. Apple should follow Google’s recent changes and ensure youth ages 13–17 do not have easy access to apps rated 17+, and Google should address the workaround that allows 13-to 17-year-olds to easily bypass age restrictions and download apps rated Mature 17+. 

3. **Ensure apps promoted by mobile app stores match the age of the user.**

   If a store has decided that an app is not appropriate for a particular age group, as per the age rating, then the store should not promote the app or make it visible to that age group.

4. **Standardize age ratings to ensure consistency across app stores.**

   Whether a child can download an app should not arbitrarily depend on whether they use a Google or Apple device.
C3P is a national charity dedicated to the personal safety of all children. C3P operates Cybertip.ca, Canada’s tipline to report child sexual abuse and exploitation online, and provides other intervention, prevention, and education services.

In January 2017, C3P established Project Arachnid—a web platform designed to detect known images of child sexual abuse material (CSAM) and issue removal notices to electronic service providers (ESPs) where possible.

C3P also supports survivors whose child sexual abuse was recorded and distributed online. Through our work with survivors, crucial contextual information about the nature of child sexual abuse is collected and shared with stakeholders committed to the safety and protection of children.

In addition to our work with individual survivors, we support several survivor advocacy groups. C3P is dedicated to bringing their voices to the forefront in order to challenge the inadequate response to the prevalence of child sexual abuse material and change the world for these individuals, their families, the children still enduring abuse, and to prevent it from happening wherever possible. Learn more at protectchildren.ca
Apps and the internet offer a largely unrestricted space where children, youth, and adults are able to coexist and mingle without the safeguards that exist offline. The failure of governments to regulate protections online, and of industry to implement meaningful safeguards, has resulted in countless children and youth being sexually harmed on apps they have access to every day. In 2021, Cybertip.ca, Canada’s tipline to report online child exploitation, saw a 37 per cent increase in reports of online victimization of youth. Within these Cybertip.ca reports, it was common to see initial contact on Instagram®, TikTok™, Discord™, and Omegle® with the offender then moving children/youth to platforms such as Skype® or Google Hangouts®—apps that many youth use every day and that are readily available for download in Apple’s App Store and Google Play.

A Business of Apps report from November 2021 noted, “Outside of China, Apple and Google control more than 95 per cent of the app store market share through iOS and Android, respectively.” As such, these trillion dollar U.S. companies have positioned themselves as the gatekeepers to most of the apps children and youth use, and are profiting enormously as a result. While Google Play has recently implemented changes that help protect users aged 13–17, from what we observed, Apple’s App Store seemingly offers little in the way of protection for those older than 12, who still need to be safeguarded online.

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COPPA – The benchmark for 13+ as the online age of adulthood

When the U.S. enacted the Children's Online Privacy Protection Act (COPPA) in 1998, it essentially established 13 as the default age of privacy protection on the internet, which then became the de facto age of adulthood online given the heavy influence of U.S. companies. This law prohibits platforms and online services from collecting and disseminating the personal information of children under the age of 13 (such as name, address, and phone number) without parental consent. In 2013, the law's scope was widened to cover data such as photos, videos, and geolocation.

As the Wall Street Journal notes, in the initial drafting of COPPA, the proposed age of protection was set at 15. However, in an unusual alignment, both e-commerce and children's advocates lobbied for the lower age of 13. The former was worried they'd miss out on a lucrative market, while the latter raised concerns that the need for parental consent would limit youths' access to important information around topics like reproductive health, and help in abusive situations. After COPPA's implementation, internet platforms and website providers viewed it as a convenient benchmark when creating terms of service for their online products. If they wished to avoid obtaining parental consent, they would simply offer their products to users aged 13 and older.

As one of the only official and enforceable safeguards in the U.S. for children on the internet, many have lobbied to extend its protection by increasing the age from 13 to as far as 16. It has also been argued the over two-decades-old Act needs to be modernized and strengthened to address today's current social media landscape, which features companies and realities that did not exist when COPPA was enacted.

Several proposed U.S. bills aim to do exactly that. Together, they seek to increase the age of privacy protection to a higher and more developmentally-appropriate age, broaden the scope of data that is protected, allow parents and children to "erase" personal information, and apply the law to all sites likely to be accessed by children and youth, not just those specifically directed at children. These changes are desperately needed to increase children and youths' protection and privacy online generally and on apps specifically. Until these bills or related regulations are passed—if they are passed at all—services such as Apple's App Store can continue to treat 13–17 year olds as adults despite their responsibilities and stated commitments to protect children.

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14 Those bills include Children and Teens' Online Privacy Protection Act, Preventing Real Online Threats Endangering Children Today (PROTECT) Kids Act, and Protecting the Information of our Vulnerable Children and Youth Act (Kids PRIVCY Act).
WHAT CYBERTIP.CA SEES IN REPORTS INVOLVING YOUTH

Through operating Cybertip.ca and the data collected by Project Arachnid, C3P has seen the dire results of letting youth fend for themselves online—despite them not yet having the developmental skills and knowledge to do so. The average age of victims reporting to Cybertip.ca regarding online victimization (including luring, sextortion, and the non-consensual distribution of intimate images) is 14. Female victims mainly ranged in age from 12–14, and male victims were primarily 15-17.\footnote{From reports received by Cybertip.ca between September 2021 and February 2022.}

Additionally, C3P’s June 2021 report, \textit{Project Arachnid: Online availability of child sexual abuse material}, further underscores how youth are being left behind in the digital space. Overall, child sexual abuse images depicting older adolescents (post-pubescent) take much longer to be removed than images of younger victims. Providers often resist removal requests involving this age group, as they believe they cannot verify the child is underage simply by looking at the image. Rates of image recidivism\footnote{The rate at which images that were previously the subject of a removal notice for a respective electronic service provider re-emerges on their service and is re-detected by Project Arachnid.} is also higher for youth than younger victims. This means youth typically experience longer and repeated cycles of victimization.

Signatories to the Voluntary Principles to Counter Online Child Sexual Exploitation and Abuse

Apple and Google have often publicly stated commitments to keeping children and youth safe online. Both companies are signatories to the 2020 \textit{Voluntary Principles to Counter Online Child Sexual Exploitation and Abuse}.\footnote{Five Country Ministerial. (2020). \textit{Voluntary principles to counter online child sexual exploitation and abuse}. https://www.publicsafety.gc.ca/cnt/cntng-crm/chld-sxl-xplttn-ntrnt/_fls/vlntry-prncpls-en.pdf} As part of that commitment, both companies publicly endorsed 11 principles, including Principle 7, \textit{A Specialised Approach for Children}, which in part states:

\textit{“Principle 7: Companies seek to adopt enhanced safety measures with the aim of protecting children, in particular from peers or adults seeking to engage in harmful sexual activity with children… These risks require taking a considered approach to the safety of users, which may include efforts to understand whether users are children when appropriate and where possible.”}

In signing the \textit{Voluntary Principles}, Apple and Google have publicly committed to safeguarding minors using their services.

Apple and Google also make public claims that would lead parents to believe their app stores are safe for young users. One of Apple’s taglines is, \textit{“The App Store. A Safe Place for Kids,”} while Google Play states, \textit{“We help you manage what’s right for your family online.”} Yet as this report demonstrates, such claims provide parents with a false sense of safety: Apple is failing to prevent youth from downloading age inappropriate apps on its App Store despite their public commitment, and, though the recent changes reflect an improvement for Google, there are still areas that require changes on Google Play to help keep kids safe.


\footnote{Google. (n.d.). We help you manage what’s right for your family online. https://safety.google/families/}
App store age ratings are just a guideline, not a failsafe

With an average of 820 new apps being added to Apple’s App Store and 1,833 to Google Play every single day, caregivers and families are faced with a growing digital landscape. When caregivers want to learn about an app on Apple’s App Store or Google Play, one piece of information they are presented with is the app’s age rating. An age rating indicates the age group for whom the app is generally suitable, such as Everyone or Mature 17+. If a user clicks on the age rating, they’ll also find content descriptors that may indicate what has earned the app that age rating. These are seemingly based on the app developer’s responses to questionnaires they complete when submitting an app to either store, each of which have their own unique questionnaire and age ratings system.

Example: Apple App Store age rating

Example: Google Play age rating

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22 Apple’s App Store uses the term “age ratings” whereas Google Play uses the term “content ratings.” For brevity, in this report we refer to both stores’ ratings as “age ratings.”
Apple's App Store age ratings

App Store Preview

GET STARTED
Age Ratings

4+
Apps in this category contain no objectionable material.

9+
Apps in this category may contain mild or infrequent occurrences of cartoon, fantasy or realistic violence; and infrequent or mild mature, suggestive or horror-themed content which may not be suitable for children under the age of 9.

12+
Apps in this category may also contain infrequent mild language; frequent or intense cartoon, fantasy or realistic violence; mild or infrequent mature or suggestive themes; and simulated gambling which may not be suitable for children under the age of 12.

17+
You must be at least 17 years old to download this app. Apps in this category may also contain frequent and intense offensive language; frequent and intense cartoon, fantasy or realistic violence; and frequent and intense mature, horror and suggestive themes; plus sexual content, nudity, alcohol, tobacco and drugs which may not be suitable for children under the age of 17.

Google Play age ratings

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVERYONE</td>
<td>Content is generally suitable for all ages. May contain minimal cartoon, fantasy or mild violence and/or infrequent use of mild language.</td>
</tr>
<tr>
<td>EVERYONE 10+</td>
<td>Content is generally suitable for ages 10 and up. May contain more cartoon, fantasy or mild violence, mild language and/or minimal suggestive themes.</td>
</tr>
<tr>
<td>TEEN</td>
<td>Content is generally suitable for ages 13 and up. May contain violence, suggestive themes, crude humor, minimal blood, simulated gambling and/or infrequent use of strong language.</td>
</tr>
<tr>
<td>MATURE</td>
<td>Content is generally suitable for ages 17 and up. May contain intense violence, blood and gore, sexual content and/or strong language.</td>
</tr>
<tr>
<td>ADULTS ONLY</td>
<td>Content suitable only for adults ages 18 and up. May include prolonged scenes of intense violence, graphic sexual content and/or gambling with real currency.</td>
</tr>
</tbody>
</table>

Learn more on the [ESRB website](https://www.esrb.org).
Given that these app rating descriptions contain ages/age ranges, it would be reasonable for a parent to assume their child or youth can safely use apps if their age matches the mobile app store’s age rating. In fact, many parents do exactly that: A national survey of U.S. adults found that two in three parents consider an app’s age rating when deciding whether it is appropriate and safe for their child. Yet, this is not the case. As Google publicly states, “App ratings are not meant to reflect the intended audience. The ratings are intended to help consumers, especially parents, identify potentially objectionable content that exists within an app.”

A parent might also reasonably assume that a mobile app store’s age rating determines the ages of users who can download the content—in other words, the stores enforce age ratings—which, from our observation, is also not accurate. When setting up an account in either mobile app store, users (or for those under the age of 13, their parents) are required to enter the user’s date of birth. Assuming parents and age-eligible youth are truthful when entering their information, the mobile app stores know the age of the children and youth on their services from the moment they sign up. For some families, this may cause them to place a level of trust in the mobile app store’s ability to ensure their children and youth only have access to age-appropriate material. However, this is not always the case.

**CHILDREN USING FAKE AGES TO SET UP ACCOUNTS**

C3P is aware that children sometimes set up accounts using a fake age in order to access apps they are not old enough to use, both in a mobile app store and on the apps themselves. As one report found, “25% of ten-year-olds and 43% of 11-year-olds who go online have a social media profile, despite a minimum age of 13 for most social media sites.” While this is certainly happening, it is not our focus here. This report is specifically examining what apps a user aged 11 and 13 is allowed to download by Apple’s App Store and Google Play.

An April 2021, article by *The Telegraph* reported that both Apple and Google allowed underage users to download adult dating apps such as Tinder®, OK Cupid®, and Match™. Even the app executives themselves raised concerns over the ease at which underage users could download the adult-only apps. “Despite our multiple requests over the years, Apple and Google still allow underage users to download our apps, even when they know the individuals are under 18,” said Jared Sine, chief legal officer of Match, which owns Match.com™ and the adult dating apps OkCupid, Tinder, and Bumble™.

In August 2021, the Tech Transparency Project’s report, *Apple’s App Store Loopholes Put Children at Risk*, investigated the ability of a simulated 14 year old’s account to access apps rated 17+ in Apple’s App Store. Reviewing 75 apps categorized under dating, hookups, online chat, and gambling, the investigation found, “major holes in the App Store’s child safety measures, showing how easy it is for young teens to access adult apps that offer dating, random chats, casual sex, and gambling, even when Apple knows the user is a minor.”

These are only a few examples of how, even when children and youth truthfully declare their age in Apple’s App Store or Google Play account, the mobile app stores have allowed children and youth to download apps that are rated for older users (either by the app store, the app developer, or both). Apple and Google set the criteria that determine app age ratings on their mobile app stores and know the date of birth associated with each users’ account. Google has recently demonstrated these changes are possible. Apple also needs to start enforcing their own age ratings.

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26 In this report, references to a user’s age means the age associated to their account and assumes it has been entered accurately.
28 Google’s recent changes mean that while accurate at the time, this is not the case on Google Play at the time this report was written.
The purpose of this report is to review whether and how Apple and Google are enforcing app age ratings for two age categories:

- Children (under 13 years old)
- Youth (13–17 years old)

C3P analysts created test accounts for children and youth, and then attempted to download 18 apps from each age category. These were selected to include a range of types of apps that are popular with, or that pose particular risk to, children and youth, including social media, dating, kink, and chatroulette-style apps. Some apps were chosen in advance and others were added as they appeared in search results during the review. In conducting this research, C3P analysts made some interesting discoveries that led them to further investigate the age ratings of apps promoted to children and youth, the (lack of) consistency in age ratings for an app across the two mobile app stores and an app’s terms of service, as well as examining how app ratings are determined.
Between January 27 and February 1, 2022, C3P analysts set up multiple app store testing accounts on Apple’s App Store and Google Play as 11-year-old and 13-year-old users, and then reviewed age-related ability to download apps on each store. The testing was conducted on an iPhone 12 (iOS15.3) and a Samsung Galaxy A52 (Android version 11). All testing was done from Canada using the Canadian versions of Apple’s App Store and Google Play.

Setting Up App Store User Accounts

On each platform, C3P analysts created multiple accounts in two age categories. To test what apps a child under 13 could download, they created accounts as 11-year-old users with a birthdate of January 1, 2011. To test what apps youth aged 13–17 could download, analysts created accounts as 13-year-old users with a birthdate of January 1, 2009.

The process for setting up a user account depended on the user’s age. Both Apple’s App Store and Google Play required that a parent set up accounts for children under 13. Youth users 13 or older are able to set up their own account without parental involvement.

USE OF PARENTAL CONTROLS FOR YOUTH ON APPLE’S APP STORE AND GOOGLE PLAY APPEARS TO BE DECIDED BY THE YOUTH USER

Apple offers parental controls for those over 13, if the youth’s Apple ID is set up by the parent under Family Sharing. However, while using a 13-year-old’s testing account, C3P analysts simply clicked “Stop Using Family Sharing” under settings on their Apple device, and were able to download apps without parental permission, a process that has also been documented elsewhere.

Similarly on Google Play, if an account was set up as a child account with Family Link, when youth turn 13 Google allows them to choose if they want parental supervision to continue or not.

The Google for Families Help page states, “[t]he child can choose to maintain their existing supervision settings and have a parent continue to manage their account.”

With the exception of the testing on Google Play on how to bypass the restrictions for youth, which was done on March 7-8, 2022.


How we set up accounts as 11-year-old users

Apple

When C3P analysts tried to set up an account as an 11-year-old in Apple's App Store, they received prompts to have a parent or guardian create the account through Family Sharing. This involved using a parental Apple ID that has a credit card associated with it, and then entering the card's three-digit CVV Security Code.

Apple’s App Store: Creating an account as an 11-year-old

Age gate on Apple’s App Store:

<table>
<thead>
<tr>
<th>Name and Date of Birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>First name: Jory</td>
</tr>
<tr>
<td>Last name: Smithson</td>
</tr>
<tr>
<td>Date of birth: 2009-01-01</td>
</tr>
</tbody>
</table>

Invalid Date of Birth
You cannot create an Apple ID at this time. Try again later.

Age gate on Google Play:

Can’t create the account
You cannot create a Google Account because you do not meet the minimum age requirement.

CHILDREN BYPASSING PARENTAL CONSENT CONTROLS

Though methods to beat parental controls and age verification are outside the scope of this report, C3P analysts also experimented with ways to circumvent the adult verification on both Apple's App Store and Google Play. For both, C3P analysts received a prompt for parental consent after entering a user age of 11 and immediately tried to change the birth year associated with the account to represent an 18-year-old. On Apple’s App Store, a pop up appeared that said their date of birth was invalid and to try again later. Following this cue, C3P analysts were able to circumvent this safeguard by trying again hours later. On Google Play, a screen appeared stating the account could not be created because, “you do not meet the minimum age requirement.” As with Apple’s App Store, C3P analysts were able to try again hours later and successfully created an older aged account.
Google

When attempting to set up user accounts as children under 13, C3P analysts were prompted to use Google Family Link. They had to enter a parent’s phone number or email address, which then sent a notification to the parent’s device, requesting confirmation that the adult was indeed setting up the child’s account.

How we set up accounts as 13-year-old users

On both Apple’s App Store and Google Play, youth user accounts are set up in the same way as adult user accounts. C3P analysts simply had to set up an Apple ID or Google Account by entering a date of birth aged 13 or older, provide an email address and phone number, and agree to the terms; they did not need to use a parent account or get parental consent to set up the 13-year-old’s testing accounts.

Reviewing ability to download apps

After creating the accounts as 11- and 13-year-olds on Apple’s App Store and Google Play, C3P analysts reviewed whether these accounts could download a range of popular social platforms, dating/hookup apps, and chatroulette-style apps.

The selection of apps was an iterative process: C3P analysts planned to investigate some of these apps in advance, whereas others were learned about (and subsequently reviewed) during this study. C3P analysts also only reviewed apps that appeared in both app stores. Ultimately, 18 apps were reviewed (see Table 1).
When setting up testing accounts for an 11-year-old as the parent on Google Play, C3P analysts were prompted to review the settings that determine what content is visible to a child when browsing the mobile app store. The default settings were Teen for apps and games, 14A for films, and 14+ for TV, and “restrictions on” for books. Aside from books, the default setting was for a 13-year-old or older user, even though C3P analysts had already entered the user’s age as 11 and even though age-congruent settings such as Everyone and Everyone 10+ were available.

To change the default setting of Teen for their child’s apps and games, a parent would need to click on the drop down arrow beside “Controls” on Google Play, and then again on the drop down arrow beside “Apps & games.” Here a parent would find options of both Everyone and Everyone 10+. These settings, which are easy to miss or skip past, make a significant difference in what content is visible to a user under 13, as outlined later in this report. If a parent even saw this setting, it would be difficult for them to know what leaving it as the default option would mean for their child.

This report uses Google’s default browse settings of Teen for the 11-year-old’s Google Play tests except where otherwise noted.
Table 1. What apps could C3P analysts download from an 11-year-old and 13-year-old’s testing account?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>STORE AGE RATING</td>
<td>11 Y/O</td>
</tr>
<tr>
<td>Snapchat</td>
<td>13+</td>
<td>12+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td>TikTok</td>
<td>13+</td>
<td>12+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td>Instagram</td>
<td>13+</td>
<td>12+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td>Facebook</td>
<td>13+</td>
<td>12+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td>Twitter</td>
<td>13+</td>
<td>17+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td>Reddit</td>
<td>13+</td>
<td>17+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td>Tinder</td>
<td>18+</td>
<td>17+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td>Hinge</td>
<td>18+</td>
<td>17+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td>Threesome</td>
<td>18+</td>
<td>17+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td>Camsurf</td>
<td>18+</td>
<td>17+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td>ChatHub</td>
<td>18+</td>
<td>17+</td>
<td>No but can ask parent</td>
</tr>
</tbody>
</table>

32 "App Age Ratings" are from the app’s terms of service.
33 The 11-year-old user accounts used to test this were created using Google Play’s default browse settings of Teen.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinkoo</td>
<td>18+</td>
<td>17+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mature 17+</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No, not visible</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Not visible</td>
</tr>
<tr>
<td>Messenger</td>
<td>13+</td>
<td>12+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Everyone</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No but can ask parent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>VSCO</td>
<td>13+</td>
<td>12+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Everyone</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No but can ask parent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>YouTube</td>
<td>13+</td>
<td>17+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Teen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No but can ask parent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Kik</td>
<td>13+</td>
<td>17+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Teen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No but can ask parent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Yubo</td>
<td>13+</td>
<td>17+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Teen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No but can ask parent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Whisper</td>
<td>13+</td>
<td>17+</td>
<td>No but can ask parent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Teen</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>No but can ask parent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>
A. There is an inconsistent enforcement of app age ratings

C3P analysts found that users both under 13 and 13-17 were restricted in what apps could be downloaded on Google Play (for the most part). On Apple’s App Store, while users under 13 were restricted, those 13 and over could download any app attempted, even those rated 17+ (or 18+ by the apps themselves) that are clearly meant for adults. We describe these findings below; see Table 1 for findings from all tests of age enforcement across the 18 apps.

Both stores provide some protections for child users under 13 by requiring parental consent to download apps rated for older users. This design choice does provide some protection, compared to no age gates. However, by permitting children to search for and ask parents whether they can download apps intended for older users, these trillion dollar companies have essentially shifted the onus of child safety solely on to parents, and shed any responsibility themselves outside of this simple checkpoint.

Child users can ask parents for permission to download apps rated for older users

On Apple’s App Store, users under 13 can see search results for apps rated 12+ to 17+ but they cannot download them without a parent or guardian’s permission. To ask for permission, they can click a pop-up that will notify the linked parent account of the request; they can only download the app if the parent approves the request.

Making apps rated older than the user visible in search results means that the system has been built so that children can see, become intrigued by and put pressure on their parent to be allowed to download apps that are not intended for them. Child users can also find and ask permission to download adult apps like Tinder, Hinge™, or Kinkoo™. These apps all have their own user age rating of 18+; it does not make sense that children are able to see them, let alone download them even with parental permission.

On Google Play, how children see and interact with apps rated Teen and Mature 17+ depends on the content browsing settings. If the parent:

- Accepted the default settings, a child under 13 will be able to view search results for apps rated Teen but not Mature 17+ on Google Play. As on Apple’s App Store, they would need parent’s permission to download the app, but unlike on Apple’s App Store, they would not be able to see search results for or download apps rated Mature 17+.

- Changed the content browse settings for apps and games from the default of Teen to Everyone or Everyone 10+ (see page 17), then apps rated Teen or Mature 17+ in Google Play are not visible in search results and children cannot ask parents for permission to download such apps.

Example: Ask a parent for permission to download an app from Apple’s App Store
- Selected Mature 17+ on the content browse settings, apps rated for Teen or Mature 17+ are visible in the search results and a child can ask their parent for permission to download.

On Google Play, the content browse settings on a child’s account significantly impacts what apps they can see and request permission to download.

**SET TO TEEN BY DEFAULT FOR A SEVEN-YEAR-OLD’S TESTING ACCOUNT**

C3P analysts created an account for a seven-year-old specifically to test Google’s default content browse settings for an account involving a younger child. Even for a child so young, Google’s default content browse setting is Teen, meaning a seven-year-old can also ask for access to apps like Snapchat®, TikTok, and Instagram. This testing account was not used elsewhere in this review.

**Default Google Play content browse settings when setting up an account for a seven-year-old:**

Instead of simply enforcing their own store’s app age ratings—as Google Play does when a determined parent first finds and then knows to select the Everyone and Everyone 10+ content browse settings—Apple’s App Store and Google Play have designed their default systems so that a child can ask their parent to download an app rated for older users, and then it is up to parents to have to say “no.” These design choices have the result of putting the burden on parents and subtly signals that it may be ok for children to use these apps.

Presumably COPPA, and the fines associated with violating it, are the main reason why children under 13 cannot unrestrictedly download apps rated 13+. 
POSSIBLE GLITCH ON APPLE’S APP STORE GIVES CHILD ACCOUNT ACCESS TO 17+ APPS

C3P analysts created multiple testing accounts as 11-year-old users on Apple’s App Store. Alarmingly, two of these accounts functioned as if they were set up as 13-year-old user accounts. C3P analysts could download apps rated 12+ by Apple (without parental permission) and all that was needed to download apps rated 17+ was to click the pop up confirming they were 17 years old or older. This then allowed the 11-year-old testing account to access content like what’s pictured below on TikTok and ChatHub™ without registering or entering any additional information about their age.

Searching “Girlz” on TikTok without registering:

![TikTok search results for Girlz](image)

ChatHub™ opening screen after clicking “Quick registration”:

![ChatHub opening screen](image)

Given our experience, it seems likely that other users—real children—may have this experience, too. We do not otherwise report results from these accounts.

---

34 There are multiple apps called ChatHub on the Apple App Store. This one is developed by ACCESS INC.
13- to 17-year-olds’ access to apps rated 17+ depends on the mobile app store they are using

On Google Play when C3P analysts used the 13-year-old’s testing accounts they were able to see apps rated Everyone, Everyone 10+, and Teen, (as expected), but they could not view search results for apps rated Mature 17+ and therefore could not download them.

On the other end of the spectrum, C3P analysts testing the 13-year-old user accounts were able to download any app attempted on Apple’s App Store, regardless of its age rating. As expected, they were able to view and download apps rated for users 12 and older. They were also able to download apps rated for users 17 and older with just an additional click; when a 13-year-old user tapped to download an app rated 17+, a pop up appeared stating the app, “contains age-restricted material. Tap OK to confirm that you are 17 or over. Your content will then begin downloading immediately.” When C3P analysts clicked “OK,” the app downloaded even though the app downloaded was rated for older than age associated with the account.

This lack of enforcement for youth on Apple’s App Store means that on the day a child turns 13, they go from needing a parent’s permission to download apps like Snapchat and Instagram, to being able to download apps such as adult video chat, fetish community finders, and adult dating and hook up apps. As 13-year-old users, C3P analysts were able to easily download the apps Threesome™, Kinkoo, and Tinder. This lack of enforcement by Apple renders age ratings meaningless for users 13–17 years old.
CHANGES AT GOOGLE ARE RECENT AND EASILY BYPASSED

C3P analysts first tested the ability to download apps from accounts for 11- and 13-year-olds in the fall of 2021. At that time, the results for searching from an 11-year-old’s account were identical to what we reported above.

However, the results for the 13-year-old’s testing account have changed. While a 13-year-old user cannot currently view search results for or download apps rated Mature 17+, in fall 2021 they could download any app from the Google Play store, regardless of age rating (including the adult dating and kink apps). This was similar to what happens now for 13-year-olds on Apple’s App Store, except that there was not even a pop up to click to “confirm” they were 17.

While we are encouraged by Google’s progress in this area, it is important to note that these changes are very recent—and easily bypassed by 13-year-old users.

To investigate whether there are easy workarounds for the new controls, C3P analysts searched “Google Play turn parental controls off” on Google and found multiple results outlining the steps to turn off parental controls without a pin or resetting the pin without having the old one. The top three results included an article from Business Insider\(^35\) the Google Play Help page, “How to set up parental controls on Google Play,”\(^36\) (which included instructions for “I forgot my pin”), and “How to Disable Parental Controls On Android — wikiHow.”\(^37\)

Using a 13-year-old’s account, C3P analysts were able to implement the steps in under a minute and immediately download all eight apps rated Mature 17+ by Google Play included in this report.

C3P analysts also tried this from an 11-year-old’s account and found that it did NOT work then. This implies Google may know about this workaround and has addressed it for those under 13, but has not addressed this gap in protection for 13- to 17-year-olds.


B. Apple’s App Store and Google Play promoted apps rated above the age associated with the account.

During this review, C3P analysts noticed apps rated for older users were promoted in search results, including apps clearly intended for an adult audience. This happened when using both the 11- and 13-year-old testing accounts on Apple’s App Store. On Google Play, it depended on the 11-year-old’s testing account’s content browse settings.

**Apps promoted on an 11-year-old’s testing account**

When searching for some apps as an 11-year-old user on Apple’s App Store, C3P analysts saw apps promoted that were rated 17+ within the search results. While users this age are not able to download these apps without parental approval, it is highly concerning that they are visible—and suggested—to an 11-year-old at all.

For example, when searching for *Snapchat* (rated 12+ by Apple and 13+ by Snapchat), C3P analysts saw ads for *Sex Game: Hook Up, Dating and Naughty Match – Meet&Live Chat*, in the search results, among others.

**Searching for Snapchat as an 11-year-old brought up multiple apps rated Mature 17+, including**

![Screenshot of Snapchat search results with ads for explicit apps](image-url)
Searching for apps rated 17+ brought up other apps clearly intended for adults.

When searching for Yubo™ (rated 17+ by Apple but 13+ in the app’s own terms of service and Teen on Google Play), Addchat – Random chat, Random Chat: Oops; and 3Fun: Threesome Couples Dating; and Chatous: 18+ Live Video Chat were promoted to the 11-year-old user.

As noted above, the apps that were visible to C3P analysts on Google Play depended on the account’s content browse settings for apps and games. If analysts changed the setting to Everyone or Everyone 10+, they only saw apps rated to the age of the user. But if left to Google’s default of Teen, then C3P analysts were regularly shown apps rated Teen even though they were not old enough to download them without their parent’s approval.

For example, when C3P analysts searched for Snapchat as an 11-year-old user (with default Google Play content browse settings), all of the “Similar apps” Google Play suggested were rated Teen. While less egregious than Apple’s App Store’s search results, promoting apps that are rated beyond the age of the child user subtly places pressure on parents to have to say “no” to requests for apps their children should not have access to.
Apps promoted to 13-year-old users

This also happened when C3P analysts used Apple's App Store as a 13-year-old. Searching for Facebook brought up Tinder. Searching for Reddit brought up Juice Live: Adult Video Chat; Tinder; Bumble; and, 3Some Hookup App - The Unicorn. There is nothing stopping a 13-year-old from downloading these apps—they’re merely presented with a prompt asking them to confirm they are 17+ despite Apple having access to the age in their account. The fact that Apple is promoting this content—as well as not restricting access to it—is highly concerning and contrary to Apple's public statements that the App Store is a safe place for kids.

In comparison, when searching for Facebook and Reddit on Google Play as a 13-year-old, C3P analysts only received results for apps rated Teen or Everyone.
C. App age ratings varied between Apple’s App Store, Google Play, and the app’s terms of service

Table 2. App age ratings from mobile app stores and app terms of service

<table>
<thead>
<tr>
<th>APP</th>
<th>AGE RATING FROM APP</th>
<th>APPLES’S APP STORE AGE RATING</th>
<th>GOOGLE PLAY’S AGE RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Snapchat</td>
<td>13+</td>
<td>12+</td>
<td>Infrequent/Mild Profanity or Crude Humor; Infrequent/Mild Alcohol, Tobacco, or Drug Use or References; Infrequent/Mild Sexual Content and Nudity; Infrequent/Mild Mature/Suggestive Themes</td>
</tr>
<tr>
<td>TikTok</td>
<td>13+</td>
<td>12+</td>
<td>Infrequent/Mild Profanity or Crude Humor; Infrequent/Mild Alcohol, Tobacco, or Drug Use or References; Infrequent/Mild Cartoon or Fantasy Violence, Infrequent/Mild Sexual Content and Nudity; Infrequent/Mild Mature/Suggestive Themes</td>
</tr>
<tr>
<td>Instagram</td>
<td>13+</td>
<td>12+</td>
<td>Infrequent/Mild Alcohol, Tobacco, or Drug Use or References, Infrequent/Mild Profanity or Crude Humor, Infrequent/Mild Sexual Content and Nudity, Infrequent/Mild Mature/Suggestive Themes</td>
</tr>
<tr>
<td>Facebook</td>
<td>13+</td>
<td>12+</td>
<td>Infrequent/Mild Profanity or Crude Humor, Infrequent/Mild Alcohol, Tobacco, or Drug Use or References; Infrequent/Mild Sexual Content and Nudity; Infrequent/Mild Mature/Suggestive Themes</td>
</tr>
<tr>
<td>Twitter</td>
<td>13+</td>
<td>17+</td>
<td>Infrequent/Mild Profanity or Crude Humour; Infrequent/Mild Sexual Content and Nudity; Frequent/Intense Mature/Suggestive Themes</td>
</tr>
<tr>
<td>Reddit</td>
<td>13+</td>
<td>17+</td>
<td>Infrequent/Mild Realistic Violence; Infrequent/Mild Horror/Fear Themes; Frequent/Intense Mature/Suggestive Themes; Frequent/Intense Profanity or Crude Humour; Infrequent/Mild Cartoon or Fantasy Violence; Infrequent/Mild Medical/Treatment Information; Infrequent/Mild Sexual Content and Nudity; Infrequent/Mild Alcohol, Tobacco, or Drug Use or References</td>
</tr>
<tr>
<td>Tinder</td>
<td>18+</td>
<td>17+</td>
<td>Infrequent/Mild Profanity or Crude Humour; Infrequent/Mild Sexual Content and Nudity; Frequent/Intense Mature/Suggestive Themes</td>
</tr>
<tr>
<td>Hinge</td>
<td>18+</td>
<td>17+</td>
<td>Frequent/Intense Mature/Suggestive Themes</td>
</tr>
</tbody>
</table>

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38 Apple’s App Store and Google Play age ratings were taken from the applicable app store listing, and the ratings from the App (column 2) were taken from the app’s terms of service, verified January 21, 2022.
<table>
<thead>
<tr>
<th>APP</th>
<th>AGE RATING FROM APP</th>
<th>APPLE'S APP STORE AGE RATING</th>
<th>GOOGLE PLAY'S AGE RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threesome</td>
<td>18+</td>
<td>17+</td>
<td>Unrestricted Web Access; Infrequent/Mild Mature/Suggestive Themes; Infrequent/Mild Profanity or Crude Humour; Infrequent/Mild Sexual Content and Nudity</td>
</tr>
<tr>
<td>Camsurf</td>
<td>18+</td>
<td>17+</td>
<td>Unrestricted Web Access; Infrequent/Mild Mature/Suggestive Themes; Infrequent/Mild Profanity or Crude Humour; Infrequent/Mild Sexual Content and Nudity</td>
</tr>
<tr>
<td>ChatHub</td>
<td>Not specified</td>
<td>17+</td>
<td>Frequent/Intense Profanity or Crude Humour; Frequent/Intense Mature/Suggestive Themes; Infrequent/Mild Sexual Content and Nudity</td>
</tr>
<tr>
<td>Kinkoo</td>
<td>18+</td>
<td>17+</td>
<td>Infrequent/Mild Sexual Content and Nudity; Frequent/Intense Mature/Suggestive Themes; Infrequent/Mild Profanity or Crude Humour; Infrequent/ Mild Alcohol, Tobacco, or Drug Use or References</td>
</tr>
<tr>
<td>Messenger</td>
<td>13+</td>
<td>12+</td>
<td>Infrequent/Mild Cartoon or Fantasy Violence; Infrequent/Mild Simulated Gambling</td>
</tr>
<tr>
<td>VSCO</td>
<td>13+</td>
<td>12+</td>
<td>Infrequent/Mild Alcohol, Tobacco, or Drug Use or References; Infrequent/Mild Realistic Violence; Infrequent/Mild Mature/Suggestive Themes</td>
</tr>
<tr>
<td>YouTube</td>
<td>13+</td>
<td>17+</td>
<td>Infrequent/Mild Medical/Treatment Information; Infrequent/Mild Sexual Content and Nudity; Infrequent/Mild Realistic Violence; Infrequent/ Mild Cartoon or Fantasy Violence; Infrequent/Mild Profanity or Crude Humor; Infrequent/Mild Alcohol, Tobacco, or Drug Use or References; Frequent/ Intense Mature/Suggestive Themes; Infrequent/Mild Simulated Gambling</td>
</tr>
<tr>
<td>Kik</td>
<td>13+</td>
<td>17+</td>
<td>Frequent/Intense Mature/Suggestive Themes; Infrequent/Mild sexual content and nudity</td>
</tr>
<tr>
<td>Yubo</td>
<td>13+</td>
<td>17+</td>
<td>Infrequent/Mild Alcohol, Tobacco, or Drug Use or References; Infrequent/Mild Profanity or Crude Humor; Infrequent/Mild Sexual Content and Nudity; Frequent/Intense Mature/Suggestive Themes</td>
</tr>
<tr>
<td>Whisper</td>
<td>13+</td>
<td>17+</td>
<td>Infrequent/Mild Alcohol, Tobacco, or Drug Use or References; Infrequent/Mild Profanity or Crude Humor; Infrequent/Mild Sexual Content and Nudity; Frequent/Intense Mature/Suggestive Themes</td>
</tr>
</tbody>
</table>
Discrepancies in app age ratings

While C3P analysts were assessing whether and how they could download apps from the two mobile app stores, it quickly became apparent that app age ratings are not consistent between Apple’s App Store and Google Play. Nor were the app age ratings from the stores consistent with the age rating in the app’s terms of service. Even in instances where an app's age ratings are similar between the mobile app stores (as they are for the youth categories for example), they are still not the same; Apple’s age rating is 12+, compared to Google’s Teen rating of 13+.

Even the terminology the companies use is different. While Apple uses "age rating," Google calls it a "content rating," however, they are referring to a similar kind of age categorization.

On Apple’s App Store, a 12-year-old user is still required to get permission from their parents to download apps that are rated 12+; it is only once they turn 13 that they would no longer need parental permission. This raises questions as to why Apple would use a 12+ rating (instead of 13+), especially in light of COPPA. Without exception, the apps C3P analysts reviewed in this report that are rated 12+ in Apple’s App Store are listed as 13+ in the apps’ terms of service.

Google also had some discrepancies between their app age ratings and the ratings from the app itself that give those under 13 access to certain apps. For example, the apps Messenger and VSCO are rated as Everyone by Google, while Apple and the app’s terms of service rate the same apps 12+ and 13+ respectively.

C3P analysts reviewed six apps intended for adult (18+) audiences, as stated in each app's terms of service (see Table 3). However, none of these apps were rated for adults on Apple’s App Store or Google Play; instead, all were rated as 17+ on both stores. Apple’s App Store doesn’t have an adult-only rating; their highest age rating category is 17+. Google Play does include an age category one step above—Adults Only—yet they did not give this rating to any of the adult apps reviewed, including the dating app Tinder or the app Kinkoo that self describes as "kinky, fet, BDSM dating" app.

Some apps included in C3P analysts’ tests were listed as 17+ on Apple's App Store and Teen on Google Play. These include YouTube®, KIK®, Whisper™, and Yubo. This means that if age ratings were enforced by both stores, Google Play’s youth users would be able to download multiple apps four years earlier than their peers using Apple devices.

There is also little consistency between the age rating an app has in the app stores and what is stated in the app’s terms of service. Of the 18 apps reviewed, eight had age ratings on Google Play that matched the app's age rating set out in their terms of service (all were rated 13+ by the app and Teen by Google Play). None of the 18 apps reviewed had age ratings that matched the rating in Apple’s App Store and the app's terms of service, mainly because of Apple’s choice to use 12+ instead of 13, and 17+ instead of 18+, as the apps have rated themselves.

Discrepancies in content descriptors

Additionally, the type of information included in the content descriptors for an app by each app store is very different. For example, compare what is listed for YouTube by Apple’s App Store versus Google Play:

<table>
<thead>
<tr>
<th>APPLE’S APP STORE</th>
<th>GOOGLE PLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>17+</td>
<td>Infrequent/Mild Horror/Fear Themes; Infrequent/Mild Sexual Content and Nudity; Infrequent/Mild Realistic Violence; Infrequent/Mild Alcohol, Tobacco, or Drug Use or References; Infrequent/Mild Cartoon or Fantasy Violence; Frequent/Intense Mature/Suggestive Themes; Infrequent/Mild Profanity or Crude Humor; Infrequent/Mild Medical/Treatment Information; Infrequent/Mild Simulated Gambling</td>
</tr>
</tbody>
</table>

This provides parents with very different information depending on which store their children or youth are using. This is discussed in greater detail in the next section.
D. Both mobile app stores lacked transparency in how they establish app age ratings

Wanting to better understand how the mobile app stores determine their app age ratings, C3P analysts began researching this question. This proved to be a difficult task as neither Apple’s App Store or Google Play are transparent about their processes. This led to examining the questionnaires each company uses in the app submission process, as well as the age rating categories.

**Insufficient questionnaires**

What C3P analysts learned is that Apple’s App Store and Google Play appear to be calculating their app age ratings—both the suggested age and the descriptions of content—based on an app developer’s answers to a questionnaire about the app. A developer must submit the questionnaire as part of their request to have their app put on a mobile app store. But exactly how the mobile app stores use this information to determine the app age ratings is not public knowledge, nor is it clear what the decision-making criteria is or how it was established. Were child development experts involved? Who determined that 13-year-olds can or should be exposed to mild nudity? Even if answers to these questions were publicly available, we believe there are clear deficiencies with the questionnaires app developers are required to fill out.

**Apple’s App Store questionnaire**

Apple uses its own age-rating system. In the process of submitting an app to the App Store, developers are presented a list of content descriptors such as “mature/suggestive themes” or “sexual content or nudity.” For each type of content, developers are asked to self-declare the content’s severity and how frequently it appears on their app. The options are “none,” “infrequent/mild,” and “frequent/intense.” There is no definition or example of these terms within the survey, and information on how these categories are defined does not appear to be publicly available.

The developer is then asked questions about web access, gambling, and to select if their content is “Made for Kids.” It appears that Apple then converts this information into an age rating of 4+, 9+, 12+, or 17+, presumably according to their age rating descriptors (see page 11).

We believe this system is inherently flawed and has direct implications for children and youth.

First is the issue of the lack of definitions. Without definitions for the frequency and intensity of content, developers are free to choose the option that would open their apps up to the most possible users. Without definitions, it is also difficult for Apple’s App Store, regulatory bodies, or watchdogs to ensure that what an app developer claims about its content is accurate. Without definitions, Apple’s App Store is missing an essential element that could aid in the protection of children.
ACCURACY OF CONTENT DESCRIPTIONS

C3P analysts’ review of three adult apps rated 17+ in Apple’s App Store illustrates this problem. Although these apps are clearly used for sexual purposes, NONE listed “sexual content or nudity” as being “frequent/intense.”

Table 4. Adult apps content descriptors regarding sexual content and nudity in Apple’s App Store

<table>
<thead>
<tr>
<th>App</th>
<th>Rating</th>
<th>Content Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tinder</td>
<td>17+</td>
<td>Infrequent/Mild Sexual Content and Nudity</td>
</tr>
<tr>
<td>Threesome</td>
<td>17+</td>
<td>Infrequent/Mild Sexual Content and Nudity</td>
</tr>
<tr>
<td>Kinkoo</td>
<td>17+</td>
<td>Infrequent/Mild Sexual Content and Nudity</td>
</tr>
</tbody>
</table>

Given the way these apps are used, it seems reasonable to assume that the sexual content and nudity would not simply be “infrequent” nor “mild.” For example, consider the messages used to advertise the Threesome app on Apple’s App Store:

Looking for a hot woman to chill drink smoke vibe then maybe had [sic] a 3some or more

Hi, I am looking for a girl who would ha [sic] encounter with me and my boyfriend

The screens used to advertise Threesome in Apple’s App Store stand in stark contrast to the content descriptor’s claim that the app contains “Infrequent/Mild Sexual Content and Nudity.”
Google Play questionnaire

Google uses a process developed by the International Age Rating Coalition (IARC) system. Developers complete a questionnaire which is used to determine age ratings for different regions.

When submitting an app, the developer first selects the type of app they have created and then are asked to answer “yes” or “no” to five questions:
Next Google lists the age categories and offers developers an option to select a higher age category than the youngest possible option displayed if it would be more appropriate (younger age categories may not be available based on the options selected).

Region-specific age ratings are then automatically generated. In North America, the ratings are from the Entertainment Software Rating Board (ERSB). It is unclear how the five “yes” or “no” questions listed above are translated into an age rating with content descriptors that include frequency terms such as “mild,” “moderate,” “explicit,” and “frequent,” as included in ESRB ratings. The IARC site states, “Once the questionnaire is completed, IARC assigns the appropriate Age Rating and Content Descriptors by region.”39

While the information from Apple’s App Store lacks important context about what “Infrequent/Mild” versus “Frequent/Intense” means, Google Play lacks substantive information entirely. Although the ESRB site lists Content Descriptors similar to Apple’s (e.g., Alcohol Reference, Crude Humor, Sexual Themes), Google Play doesn’t include these descriptors in their app age ratings. Instead, they only reference interactive elements: if the app shares personal information, shares location, if there is user-generated content (“Users interact”), or in-app purchases. Even the information “Users interact” is of no use as there is no indication if users are interacting with people they know, have accepted as contacts, or are complete strangers. Without this crucial information, it would be difficult for parents to decide whether or not to grant their child access to an app. As the ESRB states, “Most parents consider each part (Rating Category, Content Descriptors, Interactive Elements) of the ESRB rating system to be either “very” or “extremely” important when deciding if a game or app is appropriate for their kids.”

**THE ERSB AND DIGITAL APPS**

The ESRB does not treat app age ratings in the same way it treats age ratings for offline products, which leaves children and youth more vulnerable online than offline. The ESRB website notes that because the rating of physical games is difficult to change once a game is shipped, “our enforcement system includes sanctions and fines (up to $1 million) that may be imposed on publishers who don’t fully disclose content to us during the rating process.” However, it does not appear that the ESRB imposes any financial penalties for digital apps or games, stating instead that, “we can promptly correct the display of an inaccurate rating assignment” which they claim, “serves as an effective enforcement mechanism.” There do not appear to be any financial or other meaningful consequences for apps that misrepresent their content during the rating process, which some developers may be inclined to do to increase the user base.

In the Google Play Help Center, Google states that, “ratings are the responsibility of the app developers and the International Age Rating Coalition (IARC),” which seemingly severs any responsibility for the content ratings listed in their mobile app store. However, Google Play does bear responsibility in app age ratings as they are providing a service to—and profiting from—children and youth.

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Problematic Age Categories

Apple and Google’s age ratings lack transparency around the age categories themselves. How were the ages of 12+ (in Apple’s case) and 17+ (for both mobile app stores) selected?

The first issue is Apple’s App Store’s choice to use 12+ as the rating for apps that, in this review, were all rated by the app’s themselves for 13-year-olds. As noted above, opting to create a 12+ rating (instead of 13+) is unusual, given both the COPPA requirements and the fact that Apple itself still requires a parent to provide permission for their 12-year-old to download an app rated 12+.

Both mobile app stores appear to use 17+ as the default age to access adult content. None of the apps reviewed here, many of which are for adults and rated as such by the app themselves, were rated above 17+ by either store. Apple does not even have an 18+ rating. These are systemic flaws that work against the protection of youth.

Apple’s App Store age ratings on Tinder and Hinge
E. Chatroulette-style apps were widely available on Apple’s App Store and accessible on Google Play if teens bypassed restrictions

C3P analysts examined the availability of video chatroulette-style apps on Apple’s App Store and Google Play. Chatroulette-style apps involve randomly matching a user with a stranger for a video conversation. Through operating both Cybertip.ca and Project Arachnid, we consistently see evidence of offenders sexually exploiting and extorting children and youth on this type of platform. Others have reported on this issue, including a 2019 Washington Post investigation that stated:

“Some watchdog groups like Protect Young Eyes say parents have been complaining to Apple about these apps and their propensity to connect sexual predators to underage victims. Police task forces have warned parents and teachers about the apps in presentations at schools around the country… One of the most common interactions, according to interviews with experts and users of the apps, is men who surprise girls by masturbating on screen.”

Precisely because of the prevalence of pornographic content, Apple banned Chatroulette and made similar apps subject to removal from its App Store in 2010. As noted in Apple’s “App Store Review Guidelines” for developers, these apps are still, technically, subject to removal today:

“Apps with user-generated content or services that end up being used primarily for pornographic content, Chatroulette-style experiences, objectification of real people (e.g. “hot-or-not” voting), making physical threats, or bullying do not belong on the App Store and may be removed without notice.”

However, Apple is not consistently removing chatroulette-style apps. When C3P analysts searched “chatroulette” on Apple's App Store, from testing accounts for both an 11 and 13 year old, they were met with a lengthy scroll of options (all rated 17+), including but not limited to:

- Banana Video Chat: Live Chat
- Chatruletka – Video Chat Online
- Camsea – Live Video Chat
- Chat for Strangers, Video Chat
- Chatspin – Random Video Chat
- Cuff: Live Video Chat
- Flirtmania: Live Video Chat
- Hippo – Random Live Video Chat
- Juice Live: Adult Video Chat
- Nowchat – Random Video Chat
- Showme: Random video chat
- Strpchat – Live Video Chat
- XV Live Chat – Video Chat


Google Play does not appear to have publicly committed to removing chatroulette-style apps, however they seem to acknowledge the risk of these kinds of apps to children in the Google Play Console Help where it states, “Social apps where the main focus of the app is to chat with people they do not know must not target children. Examples include: chat roulette style apps, dating apps, kids-focused open chat rooms, etc.”

C3P analysts found that searching “chatroulette” on Google Play with a testing account of a 13-year-old (who had not bypassed restrictions) brought up multiple apps in the results, some of which include a live video component, but such apps do not appear to have the same clear sexual content as the apps that appeared when the same term was searched in Apple’s App Store.

However, when C3P analysts tested this with a 13-year-old account that had bypassed Google Play’s restrictions—and was therefore able to see apps rated Mature 17+—searching “chatroulette” brought up multiple apps similar to those on Apple’s App Store (all age rated Mature 17+), including but not limited to:

- Omega – Live Random Video Chat
- Chat Alternative – android app
- Chatruletka – Video Chat
- RandoChat – Chat Roulette
- Camsurf: Chat Random & Flirt
- Chatrandom – Live Cam Video Chat With Randoms
- OmeTV- Video Chat Alternative
- Sky – Anonymous Chat Roulette
- Chatspin – Random Video Chat
- HOLLA – Live Random Video Chat

Most parents would not let their 13-year-old sit in a room and chat with a group of unknown adult strangers, but that is exactly what is encountered on these type of apps. Apple’s App Store and Google Play should not be allowing the same thing to happen by enabling children to download chatroulette-style apps with parental consent or allowing youth to download them.

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This report has revealed major gaps that need to be addressed by Apple’s App Store and Google Play. Apple’s App Store is lacking enforcement of their own app age ratings, particularly for the 13–17-year-old age group. It is also promoting apps intended for adults to children and youth users (who Apple knows are younger than the age listed in the app age rating), as well as highly sexualized chatroulette-style apps. While Google Play is enforcing some of their app age ratings, hard-to-locate content browse settings for children and easily bypassed restrictions for youth have created gaps in online protection.

The analysis has shown additional concerns for both Apple and Google over a lack of transparency in how age ratings are determined and inconsistency in age ratings. These findings warrant close attention and action by the tech industry and policymakers.

Parents are being given a false sense of security through app age ratings that are both misleading and unverified. Without accurate information, they are not able to make informed decisions about the safety of their children online—and they should not bear all of the responsibility. Those selling liquor and cigarettes are not permitted to look the other way when someone underage seeks to purchase these items, and nor should tech be permitted to hand off their duty for protecting children online to parents and/or the youth themselves.

The following are recommendations from C3P that, whether implemented voluntarily by industry or regulated by governments, would increase the safety and protection of children and youth when attempting to gain access and use apps:

1. **Provide Transparent Information on How Age Rating Criteria Are Reached**

Apple’s App Store and Google Play should publicly explain how they use the information from app developer questionnaires to calculate app age ratings. The explanation should include defined criteria for the frequency and intensity scales that presumably are used to help determine age ratings, as well as outlining the reason for these chosen age categories: Apple age ratings of 12+, and, both companies using of 17+ instead of 18. Access to this information would allow government and other researchers to assess the app content against the content descriptors and hold the mobile app stores accountable for their app age ratings.
2 ENFORCE AGE RATINGS LISTED IN MOBILE APP STORES

Children and youth should not be able to download apps rated for older users; they should only be able to download an app if the age rating shown in the mobile app store is consistent with the date of birth in their user account.

For children, search results for apps on Google Play only match the user’s age if a parent has selected content browse settings of Everyone or Everyone 10+. However, this is not the default setting in Google Play and isn’t currently an option at all for Apple’s App Store accounts. An 11-year-old should not be able to download apps rated 12+ or Teen or ask their parents for permission to download it. Although the current practice of having children ask for parental permission to download these apps can help to protect children, the onus should not be on parents to say “no” when their children ask to download apps that they are not old enough to use.

As for youth, Google’s recent changes mean that youth can no longer download apps rated Mature 17+, however they need to fix the workaround that allows 13- to 17-year-olds to easily bypass their restrictions and download apps rated Mature 17+. Apple must also restrict youth users’ access to content rated 17+. Youth should not be able to access apps intended for adults, just as they are unable to access offline spaces intended for adults. Apple’s App Store should immediately discontinue the use of pop ups that prompt underage users to “confirm” they are 17+ and instead enforce their own app age ratings for youth, based on the information they already have about that user’s age.

Importantly, properly enforcing age ratings would help shield children and youth from the harms of chatroulette-style apps.

3 ENSURE APPS PROMOTED BY MOBILE APP STORES MATCH THE AGE OF THE USER

Apple’s App Store and Google Play should only show users apps if the app’s age rating is consistent with the date of birth in their user account. An ad for hooking up with “naughty adults” would never play during a show rated 13+ on cable or in the previews for a PG-13 movie; it should not be allowed to be promoted to 13-year-olds on mobile app stores either. Google Play’s default browse age needs to change to automatically match the age of the user, not be set at Teen for those under 13.

4 STANDARDIZE AGE RATINGS TO ENSURE CONSISTENCY ACROSS MOBILE APP STORES

Develop guidelines to create consistency between mobile app stores so the age at which a youth can download an app does not vary based on whether they use an Apple or Google device. Currently, if the mobile app stores were to enforce their age ratings, youth Google Play users would be able to download some apps FOUR YEARS earlier than their peers using Apple devices. From a child development perspective, this is illogical.
CONCLUSION

Both Apple and Google have made public statements about their dedication to the safety of children and youth. Apple has stated that they will, “reject apps for any content or behaviour that we believe is over the line—especially when it puts children at risk.”\(^{45}\) Google said that they, “regularly engage with kids and teens, parents, governments, industry leaders, and experts in the fields of privacy, child safety, wellbeing and education to design better, safer products for kids and teens.”\(^{46}\)

As this report illustrates, **neither mobile app store is doing enough to protect children.** While Apple’s App Store provides some protection to children 12 and under, these do not go far enough and end when a child turns 13. Apple is not taking the basic safeguarding step of enforcing their own app age ratings for youth by not allowing them to download apps they know the user is not old enough to access. Google Play’s recent changes have improved their protection of youth, but by choosing a default browse setting for all users that ends up exposing children to apps they are not old enough to download. Additionally, the easy to find workaround that allows youth to easily bypass restrictions and download apps rated Mature 17+ continues to expose youth to harm. **Addressing these systemic design flaws would make significant impacts to the safety of children and youth online.**

With the exception of accounts for 13- to 17-year-olds on Google Play, both companies promote apps to children and youth that are rated older than the user. In doing so, Apple and Google are normalizing access to apps that expose children and youth to content that is not intended for them. On Apple's App Store and when youth have bypassed restrictions on Google Play, this includes chatroulette-style and dating or fetish apps which bring risk of sexual exploitation and harm to youth who should not be intermingling with adults on these apps.

These companies are not transparent about how the app age ratings are reached in the first place. In placing the decision in the hands of parents, both stores make the information contained in the store regarding child safety critical. Despite this importance, the information made available is not always accurate, appears to be unverified, and leaves parents with the mistaken impression that the risk to their child is limited or non-existent.

Conversations about online child and youth safety inevitably turn to the role of parents, but the companies that provide services to children and youth—and make money off of them—have a duty around creating safe online environments for these users. While Apple and Google have publicly signed the Voluntary Principles to Counter Online Child Sexual Exploitation and Abuse, the findings in this report show there is still much to be done to meet the objectives prescribed within those principles.

These changes need to be made by Apple and Google to better protect children and youth using their app mobile stores, whether voluntarily or because of regulations. All areas of society have some form of legal or moral obligation to take reasonable measures to protect children and the tech industry, along with governments, share in that responsibility.

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