

Reset.

# An Evaluation of TikTok's Processes for Risks to Minors

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# I

## *Summary*

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This report documents an evaluation of systems on TikTok to assess the risks posed to minors. These systems include:

- TikTok's Content Moderation System;
- Understandability of the platform for younger users;
- TikTok's safety-by-design settings; and
- TikTok's ad manager systems.

We found multiple issues that potentially do not comply with the Digital Services Act, including:

- TikTok under-moderates pro-restrictive eating disorder content, pro-suicide, and/or pro-self-harm materials;
- There was a muted response to these materials when TikTok became aware of them via the user-reporting system, and TikTok failed to respond to the majority of pro-restrictive eating disorder content and pro-suicide, and/or pro-self-harm materials when they became aware of it;
- A 13-year-old would likely not understand the design and functioning of TikTok at the point of signing on;
- Safety-by-design settings is insufficient. TikTok fails to provide best-practice privacy protections for 16-year-olds. There also appears to be a "between-country" variation on TikTok, with 16-year-olds treated differently in different countries;
- Access to safety centers and help tools is not routinely accessible to young people in their first languages; and
- Underaged targeting by age parameter selections is not completely removed from TikTok's ad manager system.

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# III

## *Introduction*

## *Introduction*

The Digital Services Act (DSA) aims to offer children and young people under 18 years old additional protection in the digital sphere.

- Recital 71 states that “the protection of minors is an important policy objective of the Union,” and describes platforms as accessible to minors when:
  - Its terms and conditions permit minors to use the service;
  - Its service is directed at or predominantly used by minors; or
  - Where the provider is otherwise aware that some of the recipients of its service are minors, for example, because it already processes personal data of the recipients of its service revealing their age for other purposes.
- Recital 71 goes on to state, “Providers of online platforms used by minors should take appropriate and proportionate measures to protect minors, for example, by designing their online interfaces or parts thereof with the highest level of privacy, safety and security for minors by default where appropriate or adopting standards for protection of minors, or participating in codes of conduct for protecting minors. They should consider best practices and available guidance, such as that provided by the communication of the Commission on A Digital Decade for children and youth: the new European strategy for a Better Internet for Kids (BIK+). Providers of online platforms should not present advertisements based on profiling using personal data of the recipient of the service when they are aware with reasonable certainty that the recipient of the service is a minor.”
- Recital 81 further indicates that very large online platforms should consider, for example, “how easy it is for minors to understand the design and functioning of the service, as well as how minors can be exposed through their service to content that may impair minors’ health, physical, mental, and moral development.” Such risks may arise, for example, in relation to the design of online interfaces that intentionally or unintentionally exploit the weaknesses and inexperience of minors or which may cause addictive behavior.
- Recital 84 explains that in assessing systemic risk—which includes risks to minors—“providers of very large online platforms and of very large online search engines should focus on the systems or other elements that may contribute to the risks, including all the algorithmic systems that may be relevant, in particular their recommender systems and advertising systems, paying attention to the related data collection and use practices.”
- In addition, Article 34 places additional requirements on Very Large Online Platforms (VLOPS) and Very Large Online Search Engines to assess the risks their services pose to children’s rights. Specifically, Article 34(1)(d) DSA requires VLOPs to undertake risk assessments, including “any actual or foreseeable negative effects in relation to [...] minors.” Article 34(2)(b) DSA explicitly states that algorithmic recommender systems, content moderation systems, enforcement of terms and conditions, and advertising systems be considered.

## ● Evaluation of TikTok's Processes for Risks to Minors

This report explores TikTok's compliance with the requirements outlined in these recitals and articles. Specifically, it evaluates four systems on TikTok for compliance:

- 1 **Content moderation systems:** A method is proposed for testing and evaluating these with regards to creating risks to minors. Specifically, it describes the method used to evaluate if platforms remove content that is harmful to minors when they become aware of it through user-reports. It describes the methods and presents findings from a September 2023 experiment around reporting and monitoring two bodies of content that were assessed by a clinical psychologist and deemed to be harmful to children:
  - a. Pro-suicide and/or self-harm content;
  - b. Pro-restrictive eating disorder content.
- 2 **Understandability for young people:** develop a simple method to evaluate *understandability* for young people and assess for dark patterns, meaning platforms' design decisions cumulatively nudge users to accept default choices that may be against their interests. It describes the methods and presents findings from a September 2023 analysis of three platforms, based on an analysis of the user journey when new accounts for minors are created.
- 3 **Safety-by-design settings:** draws on best practice and the BIK+ strategy. It assesses the user journey on TikTok, and the accessibility of help features on TikTok.
- 4 **Ad manager system:** a method for testing whether the platform allows advertising to minors based on profiling.

# III

*Evaluation of TikTok's Content  
Moderation Systems in Creating  
and Perpetuating Risks to Minors*

# *An Evaluation of X's Content Moderation Systems in Creating and Perpetuating Risks to Minors*

## Research questions:

- 1 Does TikTok's adequately moderate pro-suicide and/or self-harm material when they become aware of it?
- 2 Does TikTok's adequately moderate pro-restrictive eating disorder material when they become aware of it?

## Methodology

The research involved five steps:

### 1 Developing criteria to define harmful material.

- This research explored two bodies of content posing psychological and physiological risks to minors: pro-suicide and/or self-harm material, and pro-restrictive eating disorder material.
- We used the community guidelines for each platform to develop a coding schema to classify content (see Appendix 1 for more details). This ensures that only content violating TikTok's Terms of Service was included in this research. Each piece of content, according to their guidelines, should warrant a content-moderation action from TikTok.

### 2 Identifying pro-suicide and/or self-harm material.

Using simple searches, we identified content on TikTok that met our criteria and had not been labelled by the platform already. We consulted a clinical psychologist who assessed each piece of content that was identified, confirming that it presented a risk to young people who consume it. Material that was not deemed to be harmful by a psychologist was not included in this research.

In total we identified:

- Pro-suicide and self-harm content: 79 pieces
- Pro-restrictive eating disorder content: 107 pieces

See Appendix 2 for examples of these bodies of content.

### 3 Monitoring content pre-reporting.

We tracked this content for two weeks noting:

- View counts and growth rates;
- Labelling or warning rates, to ascertain whether any of this content was labelled by TikTok during these two weeks. We considered a piece of content labelled if an age-restriction warning, sensitivity filter, or any other sort of flag was placed on it; and
- Take down rates, to ascertain whether any of this content was taken down by TikTok during these two weeks.

### 4 Reporting the content.

We reported each piece of content as suicide and self-harm, or restrictive eating disorder content violating the Terms of Service to the platform.

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**5 Monitoring content post-reporting.**

After reporting, we tracked this content for two further weeks noting:

- View counts and growth rates;
- Labelling or warning rates to observe if any content was labelled by the platforms during these two weeks. Considered labelled if an age-restriction warning, sensitivity filter, or any other flag was placed on it;
- Take down rates, to ascertain whether any of this content was taken down by the platforms during these two weeks.

According to our analysis of the platform's community guidelines (see Appendix 1), TikTok should delete pro-suicide and/or self-harm content, and pro-eating disorder content when they become aware of it. In practice, we often see platforms label and add sensitivity filters or age filters to this body of materials; we therefore also assessed these.

Below, we describe what we found over four weeks of monitoring.

## Findings

### *TikTok's response to pro-suicide and/or self-harm material*

**TikTok does not appear to adequately label or demote pro-suicide and/or pro-self-harm content.**

Removal appears to be the most common response to pro-suicide and/or pro-self-harm material, but the platform's reactions to reporting are inadequate. The majority of content remained available and unlabelled, even after user-reporting.

Over two weeks monitoring	TikTok
<b>Pre reporting removal rate.</b> This is the % of content that was removed during the two weeks before we reported it. It may have been reported by other users, and it is often not clear why content was removed (e.g. users may have deleted the content or their accounts, moved to private, or platforms may have deleted it). However this represents the best estimate of organic removal rates.	0%
<b>Post reporting removal rate.</b> This is the % of content that was removed within 2 weeks after we reported it.	1.27%
<b>Effect of reporting on removal rate</b>	<b>+ 1.27%</b>
<b>Pre reporting labelling or warning rate.</b> This is the % of content that was labelled during the two weeks before we reported it. It may have been reported by other users, but represents the best estimate of organic labelling rates.	0%
<b>Post reporting labelling or warning rate.</b> This is the % of content that was labelled within 2 weeks after we reported it.	0%
<b>Effect of reporting on labelling rate</b>	<b>No change</b>
<b>Pre reporting growth rate.</b> This is the average growth rate of content over two weeks before we reported it (week-on-week).	0.4% growth week-on week
<b>Post reporting growth rate.</b> This is the average growth rate of content over two weeks after we reported it (week-on-week).	0.5% growth week-on week
<b>Effect of reporting on growth rate</b>	<b>+ 0.1%</b>

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*TikTok's response to pro-restrictive eating disorder material*

**TikTok does not appear to adequately label or demote pro-restrictive eating disorder content.**

Removal appears to be the most common response to pro-eating disorder material, but TikTok's reactions to reporting are inadequate. Most of the content remained available and unlabelled, even after user-reporting.

Over two weeks monitoring	TikTok
<b>Pre reporting removal rate.</b> This is the % of content that was removed during the two weeks before we reported it. It may have been reported by other users, and it is often not clear why content was removed (e.g. users may have deleted the content or their accounts, moved to private, or platforms may have deleted it). However this represents the best estimate of organic removal rates.	5.61%
<b>Post reporting removal rate.</b> This is the % of content that was removed within 2 weeks after we reported it.	11.88%
<b>Effect of reporting on removal rate</b>	<b>+6.27%</b>
<b>Pre reporting labelling or warning rate.</b> This is the % of content that was labelled during the two weeks before we reported it. It may have been reported by other users, but represents the best estimate of organic labelling rates.	0%
<b>Post reporting labelling or warning rate.</b> This is the % of content that was labelled within 2 weeks after we reported it.	1.87%
<b>Effect of reporting on labelling rate</b>	<b>+1.87%</b>
<b>Pre reporting growth rate.</b> This is the average growth rate of content over two weeks before we reported it (week-on-week).	5.39% (week-on-week)
<b>Pre reporting growth rate.</b> This is the average growth rate of content over two weeks after we reported it (week-on-week).	3.71% (week-on-week)
<b>Effect of reporting on growth rate</b>	<b>-1.68%</b>

*Limitations*

The reasons for why the content was removed are unclear. It could have been removed by the user, the user may have deleted their account or switched to private, or the content or the account may have been removed by the platform itself.

The estimations for removal rates therefore represent the highest-end estimations of removal rates by platforms.

*Conclusion*

- TikTok under-moderates both pro-restrictive eating disorder content, pro-suicide, and/or pro-self-harm materials.
- There is a very limited response to these materials when TikTok becomes aware of them via the user-reporting system. TikTok does not appear to remove, label, or demote pro-restrictive eating disorder content, nor pro-suicide and/or pro-self-harm materials.

# IV

## Evaluation of Understandability of TikTok for Young Users, Including Dark Patterns

# *Evaluation of Understandability of TikTok for Young Users, Including Dark Patterns*

## Research questions:

- 1 Could younger users understand the design and functioning of TikTok at the point of signing on, when they choose to use a service?
- 2 Do younger users encounter any dark patterns at the point of signing on to TikTok that may cause them to act against their best interests or reduce their understanding of a platform's design or functions?

## Methodology

This research involved three steps:

### **1 Recording the sign-up process for several accounts with fictional 13-year-old identities, "sock puppet accounts," on TikTok.**

We set up accounts to record the user sign-on journey in:

- a. Germany
- b. Slovenia
- c. The Netherlands

We noted and described the steps involved in this sign-up process, as described in Appendix 1.

### **2 Recording and analysing dark patterns in the sign-up process.**

Using previous research into platforms' sign-on processes,<sup>1</sup> informed by the experience of signing up to these platforms, we developed a six-point typology of dark patterns in sign-on processes, which is described below.

We assessed each step of the sign-on process for identifiable dark patterns.

### **3 Recording and analysing policies referenced in the sign-up process for understandability.**

We analysed each policy that was referenced in the sign-on process and determined if it was understandable to younger users. We did this by considering three factors:

- Is the policy available in the first language of the minor?
- What is the length of the policy, and how long would it take to read?
- What is the reading age of the policy and is it possible for 13-year-olds to comprehend?

1 Reset. Tech Australia 2021 *Did We Really Consent to This?*  
<https://au.reset.tech/news/did-we-really-consent-to-this-terms-and-conditions-young-people-s-data/>.

## Findings

### *A typology of dark patterns in the sign-on experience*

Dark patterns are design features that are intended to nudge users away from actions that align with their best interests and toward actions that are in the platform's interest.<sup>2</sup> Using previous research into the platform's sign-on processes,<sup>3</sup> and the experience of signing up to these platforms, we developed a six-point typology of dark patterns used in sign-on processes.

- 1 Inferring consent by clicking next.** Rather than making it explicit that new users are agreeing to a platform's terms and conditions, they often design the mechanisms by which users consent as the next step in the process. For example, buttons or icons might say "next," "sign up now," or "choose your sign-up method," with small text underneath these buttons that inform new users that "by clicking this you agree to our terms." It may not be immediately obvious to new users that by clicking "next" or choosing their sign-on method they are entering into a contract with the platform.
- 2 Obscuring important details.** Rather than attracting attention to and making new users aware that contractual terms and conditions or data processing requirements are involved, these are often obscured. For example, they may be presented in the smallest font, or at the very bottom of the screen.
- 3 Presenting options that may not be in a user's best interests as a "better user experience."** Many platforms allow users to choose options that maximise potential data collection, such as syncing the app with contacts or connections to their new social media accounts with old social media accounts. These ensure that more data is collected by the platform, which may not always be in a user's best interest. Likewise, they allow users to choose whether to receive notifications, which may maximise the amount of time a user spends on the platform and habituate use. However, often, these options are presented either visually or using language to provide "a better experience," gently nudging the users to select them. For example, many requests to sync apps with phone contacts claim this makes the platform more entertaining, or requests to allow location data tracking claim this makes the app more effective.
- 4 Visual promotion of options that are in a platform's best interests, while demoting options that are in the user's best interests.** Where users are provided with a choice, platforms often use visual techniques to promote one option and demote others. For example, buttons or icons that accept unnecessary data collection are often larger, more colorful, or otherwise more prominent, while options to skip or reject non-essential data collection are presented in smaller and less salient fonts.
- 5 Presenting options that are in users' best interests as temporary.** Where users are provided with a choice, platforms often present the choices that might be in users' best interests as only temporary or a choice that the platform may force them to revisit. For example, displaying options to skip or reject non-essential data collection as "not for now" or "maybe later," and/or forcing users to return to these questions repeatedly.
- 6 Click twice for no, but only once for yes.** When users are provided with a choice, and they select the choice that might be in their best interests—often declining unnecessary data collection—users are forced to select this twice. For example, if a user chooses to decline syncing apps, they may be presented with an additional step in the sign-on process where they are asked to reconsider or confirm this choice. "Clicking twice" is often not required if users select the choice that is in the platform's best interest.

These dark patterns are not mutually exclusive, and many designs employ multiple dark patterns; nor is this list comprehensive, and different typologies and dark patterns may emerge.

On analysing the sign-on process on each app, as documented in Appendix 3, we found that dark patterns were prevalent.

2 Arunesh Mathur *et al.* 2019 "Dark Patterns at Scale: Findings from a Crawl of 11K Shopping Websites" *Proceedings of the ACM on Human-Computer Interaction* November, p. 81.

3 Reset. Tech Australia 2021 *Did We Really Consent to This?*  
<https://au.reset.tech/news/did-we-really-consent-to-this-terms-and-conditions-young-people-s-data/>.

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*Dark patterns discovered in the sign-on experience*

**TikTok infers consent.** TikTok did not explicitly ask young users to review and agree to the terms and conditions as part of the joining experience.

Consent was inferred by selecting the method to use to sign up (e.g., using a phone or connecting with Facebook).

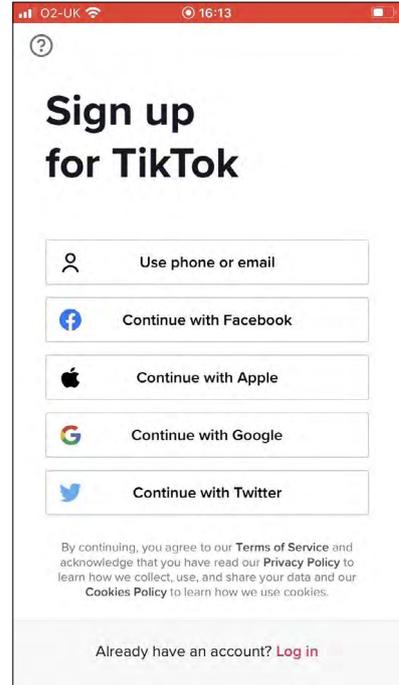


Figure 1: Screenshot of the sign-on process on TikTok

**TikTok obscures details about terms and conditions.**

The terms and conditions the user agreed to were presented once, at the bottom of the first screen. The font describing the contractual agreement is the smallest and lightest grey font on the screen, although the names of the policies are in bold. Figure 1 highlights how the terms and conditions are at the bottom of the screen.

**TikTok presents options that may not be in a user's best interests for a "better user experience."**

TikTok presents the option to allow notifications as a better experience. The sign-on process states that if the app is allowed to send notifications to the user it helps them "Stay on top of likes, comments, the latest videos, and more."

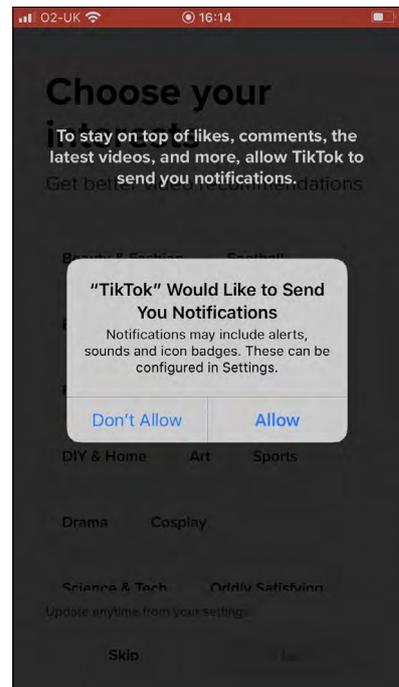


Figure 2: Highlighting how TikTok presents options that may not be in a user's best interest as providing a better user experience.

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**TikTok visually promotes options that are in a platform's best interests, while demoting options that are in users' best interests.**

In two sign-on steps—accessing contacts and sending notifications—the Allow or OK button was bolded and more prominent than the Don't Allow button. For comparison, where X pushes notifications to a user's phone, neither option is bolded, suggesting that this is a choice on TikTok's side.

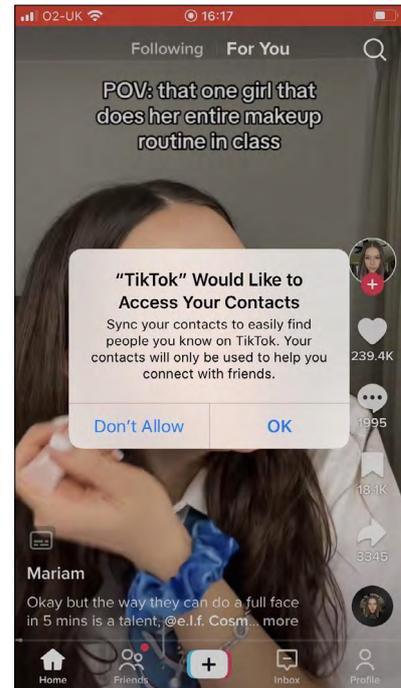


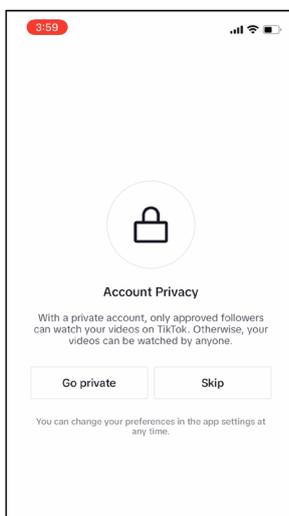
Figure 3: Highlighting how the OK button is more prominent.

Additionally, in some languages, the visual nudge is stronger than in English. For instance, the English interface prompting a 16-year-old account to choose either going private or skipping to the default of being public has action buttons with the same font sizes. However, in Slovenia, the action button for "Skip" ("Preskoči") is significantly larger than that for "Switch to a private account" ("Preklopi na zasebni račun").

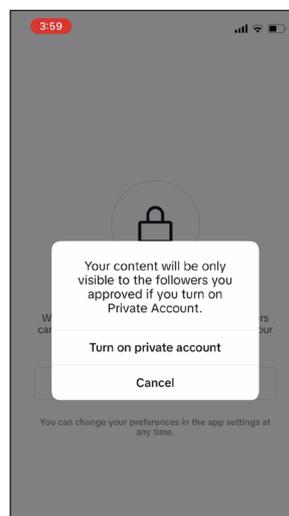
**TikTok did not present options that are in users' best interests as temporary.**

**TikTok did not require 13-year-old users to "click twice for no, but only once for yes."**

While it is beyond the scope of this methodology which focuses on 13 year olds, accounts belonging to 16 year olds on TikTok experienced some 'click once for yes and twice for no' experiences in some user cases. In the Netherlands, 16-year-olds were asked to confirm twice if they wanted to "go private" but only once if they did not select this (by selecting "skip," which makes their accounts public). If a young user selects "private" they are then asked in a second step to confirm this, implying that this may be a bad decision. Other 16-year-old accounts in Germany, Slovenia, and the Netherlands were immediately defaulted to public. For accounts for 13-year-olds, the sign-on process all defaulted these to private and displayed a screen notifying users that they were private. These findings are unpacked further in the upcoming analysis of safety-by-design features and settings.



First pop-up



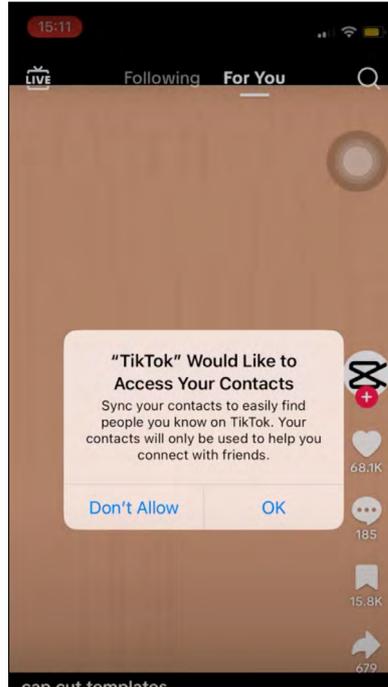
Second pop-up after choosing 'Go private'

Also beyond the scope of this method, on TikTok in some instances 16 year old users were repeatedly asked to access contacts, even when they had selected no in the sign up process (see below). In the experience of setting up a 16-year-old German TikTok account, for example, the pop-up prompting the user to allow TikTok access to Contacts showed up twice, which means after initially disallowing access, it asked for the access again. This appears to vary, and was not present in Germany and Slovenia.

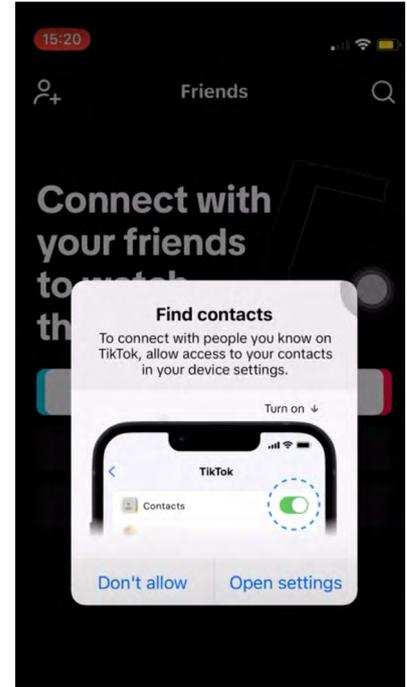
Figure 4: The "two clicks" necessary to turn an account private for 16 year olds in the Netherlands

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Additionally, TikTok did not appear to apply user choices as widely as they should. For example, TikTok notification settings default to allowing all in-app notifications, meaning the withdrawal of consent for notifications during the setup process only affects push notifications. At the same time, it takes one button to select all to enable email and push notifications, while a user has to deselect different items of notifications individually to disallow all notifications.



First pop-up at the end of the registration process



Second pop-up while browsing different windows and selecting "Friends" in the bottom menu

Figure 5: Examples of TikTok re-asking users to access contacts

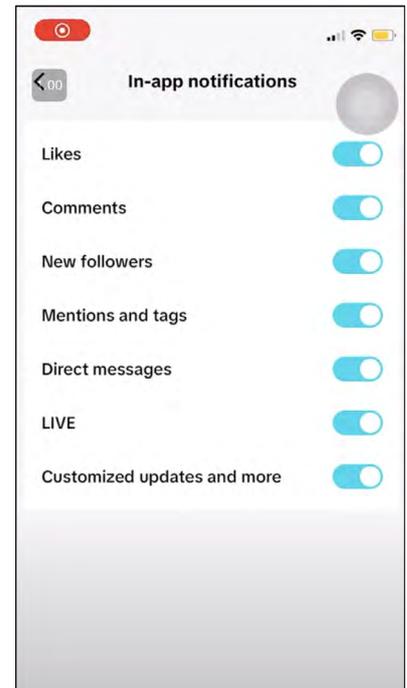
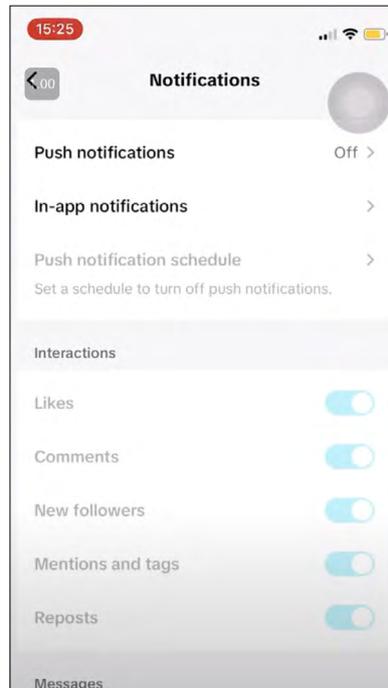
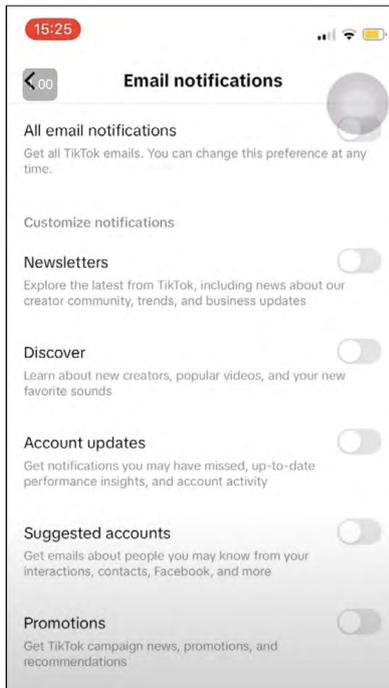


Figure 6: Examples of TikTok settings around notifications not being applied as widely as they could

## ● Evaluation of TikTok's Processes for Risks to Minors

### *Accessibility and comprehensibility of policies*

During the sign-on process, TikTok outlined which policies users were agreeing to by joining the platform. These include:

- 1 Terms of service
- 2 Privacy policy
- 3 Cookies policy

We explored if:

- 1 The policies signposted to in the process were available in accessible language;
- 2 The length of the policies and how long it takes to read them, assuming an average reading speed of 225 words per minute (which may be an overestimate for a 13-year-old); and
- 3 The reading age of these documents according to the Flesch-Kincaid Grade Level test for English and Rix Score for non-English. Both tests provide an interpretation of the "grade" at school where the text would be understandable. Most 13-year-olds are in the 7th or 8th grade depending on the country, and a grade score of 13 plus reflects college or university level. Note, the Rix Score test is not available for the Greek language.

#### **Terms of Service:**

- Available in 24 of 24 official European languages
- Average length of 4,761 words, and it would take on average 21 minutes and 12 seconds for a young person to read this
- Average readability: grade 12.9

#### **Privacy policy**

- Available in 22 of 24 official European languages, excluding Irish and Slovenian
- Additionally, young people were offered videos about privacy tips, but these were only available in English
- Average length of 5,644 words, and it would take an average of 25 minutes and 6 seconds for a young person to read this
- Average readability: grade 13.05

#### **Cookies policy**

- Available in 8 of 24 official European languages
- Average length of 2,065 words, and it would take an average of 9 minutes and 12 seconds for a young person to read this
- Average readability: grade 13

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		TikTok		
		Terms of service	Privacy policy	Cookies use
<b>Bulgarian</b>	Available	Yes	Yes	No
	World Count	4,545 20:12 mins	6,312 28 mins	
	Grade	13	13	
<b>Croatian</b>	Available	Yes	Yes	No
	World Count	4,409 19:35 mins	5,232 23:15 mins	
	Grade	13	13	
<b>Czech</b>	Available	Yes	Yes	No
	World Count	4,542 20:11 mins	5,310 23:36 mins	
	Grade	13	13	
<b>Danish</b>	Available	Yes	Yes	No
	World Count	4,908 21:48 mins	5,517 24:31 mins	
	Grade	12	13	
<b>Dutch</b>	Available	Yes	Yes	No
	World Count	5,329 23 mins	6,106 27 mins	
	Grade	13	13	
<b>English</b>	Available	Yes	Yes	Yes
	World Count	4,994 22:11 mins	5,736 25:29 mins	1,975 8:46 mins
	Grade	12	14	14
<b>Estonian</b>	Available	Yes	Yes	No
	World Count	3,844 17 mins	4,581 20:21 mins	
	Grade	13	13	
<b>Finnish</b>	Available	Yes	Yes	No
	World Count	3,588 15 mins	4,169 19 mins	
	Grade	13	13	
<b>French</b>	Available	Yes	Yes	Yes
	World Count	5,656 25 mins	6,938 30:50 mins	2,238 9:56 mins
	Grade	13	13	13
<b>German</b>	Available	Yes	Yes	Yes
	World Count	5,187 23 mins	5,861 26 mins	2,027 9 mins
	Grade	13	13	13
<b>Greek</b>	Available	Yes	Yes	No
	World Count	5,146 23 mins	6,244 28 mins	
	Grade			
<b>Hungarian</b>	Available	Yes	Yes	Yes
	World Count	4,420 19:38 mins	5,197 23 mins	1,668 7:24 mins
	Grade	13	13	13
<b>Irish</b>	Available	Yes	No	No
	World Count	5,930 26:21 mins		
	Grade	13		
<b>Italian</b>	Available	Yes	Yes	Yes
	World Count	5,323 23:39 mins	6,317 23 mins	2,076 9:13 mins
	Grade	13	13	13

● Evaluation of TikTok's Processes for Risks to Minors

		TikTok		
		Terms of service	Privacy policy	Cookies use
Latvian	Available	Yes	Yes	No
	World Count	4,137 18:23 mins	5,087 22:36 mins	
	Grade	13	13	
Lithuanian	Available	Yes	Yes	No
	World Count	3,948 17:32 mins	4,808 21:22 mins	
	Grade	13	13	
Maltese	Available	Yes	Yes	Yes
	World Count	4,994 22:11 mins	5,736 25:29 mins	1,975 8:46 mins
	Grade	13	13	12
Polish	Available	Yes	Yes	No
	World Count	4,712 20:56 mins	5,409 24 mins	
	Grade	13	13	
Portuguese	Available	Yes	Yes	Yes
	World Count	5,062 22:29 mins	6,121 27:12 mins	2,360 10:29 mins
	Grade	13	13	13
Romanian	Available	Yes	Yes	No
	World Count	5,220 23:12 mins	6,296 27:58 mins	
	Grade	13	13	
Slovak	Available	Yes	Yes	No
	World Count	4,385 19:29 mins	5,245 23:18 mins	
	Grade	13	13	
Slovenian	Available	Yes	No	No
	World Count	4,448 19:46 mins		
	Grade	13		
Spanish	Available	Yes	Yes	Yes
	World Count	5,164 22:57 mins	6,294 27:58 mins	2,184 9:42 mins
	Grade	13	13	13
Swedish	Available	Yes	Yes	No
	World Count	4,868 21:38 mins	5,651 25 mins	
	Grade	13	12	

### Case study: TikTok Privacy Videos

As part of TikTok's sign-on process, the platform has developed a series of Privacy Highlight for Teens videos that they recommend users watch. However, out of eight TikTok accounts, only two got prompted to watch the Privacy Highlights for Teens videos: a Slovenian 13-year-old account and a Dutch 13-year-old account. Both times, these videos were only available in English.

Outside of the sign-on process, these videos are also made available online. Out of all 24 EU official languages, the Privacy Highlights for Teens videos are featured only on German, French, Italian, and Spanish websites in their language. Some other TikTok webpages hosting information regarding privacy in other languages still use English videos. For example, the Bulgarian-language page on privacy and security has English-language videos embedded, while the Czech-language page on guardians' guide also only has English-language introductory videos.

## Conclusion

A 13-year-old would likely not understand the design and functioning of TikTok at the point of signing on. This is because:

- The length of time it would take younger users to read all of the policies they are agreeing to is excessive and maybe beyond legitimate expectations for a 13-year-old.
- Many younger users would be expected to read and comprehend these policies in a language other than their own, which assumes a level of education and fluency in English that young people cannot be expected to have.
- Young users could be swayed by dark patterns during the sign-on process. These include:
  - Inferring consent rather than explicitly asking users to "click" to agree to terms;
  - Obscuring details about the terms and conditions;
  - Persuading users to choose options that are not in their best interest, because they are presented as providing a better experience; and
  - Persuading users to choose options that are not in their best interest, because they are presented in visually more prominent ways.

# V

## Evaluation of Safety-by-Design Settings on TikTok

# *Evaluation of Safety-by-Design Settings on TikTok*

## Research questions:

- 1 Do young users enjoy the highest levels of privacy?
- 2 Do younger users enjoy accessible safety tools and features?

## **Methodology**

Our research involved two steps:

### 1. Recording the sign-up process for the sock puppet account on platforms

- 1 We established several sock puppet accounts for 13-year-olds and 16-year-olds on TikTok. We set up accounts in multiple EU countries to record the user sign-on journey, including:
  - Germany
  - Slovenia
  - The Netherlands

We noted the default privacy settings for each account during these sign-up processes.

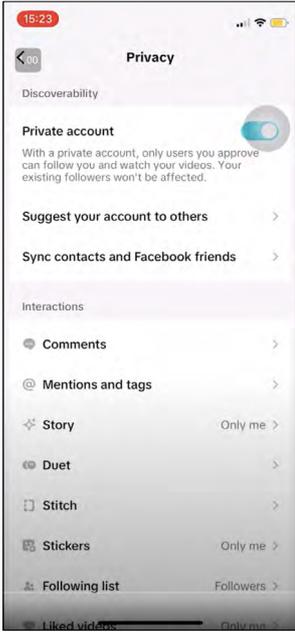
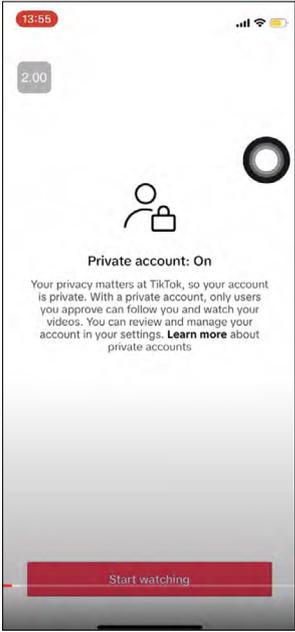
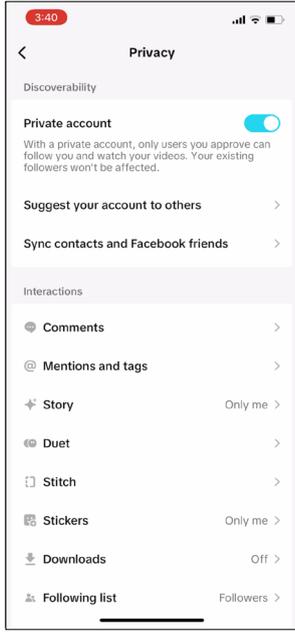
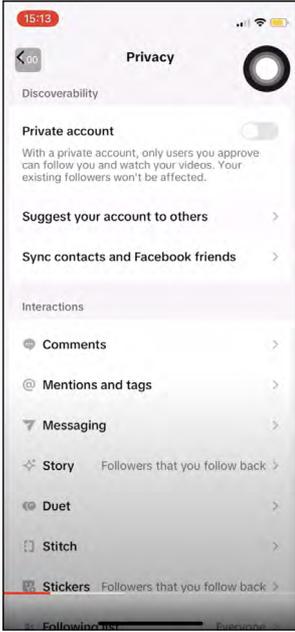
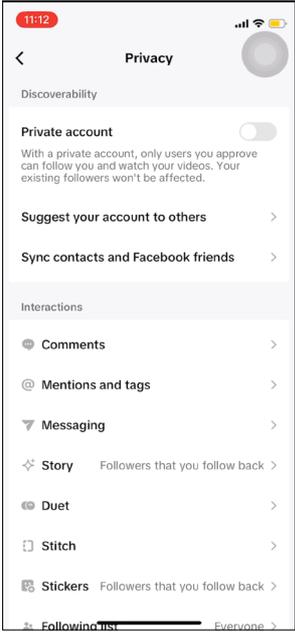
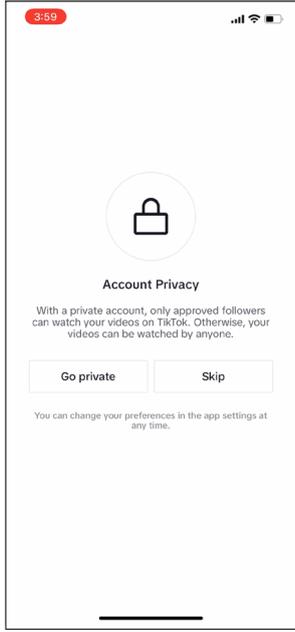
### 2 Exploring the availability of safety centers and help tools

We searched for the available help tools and safety centers on TikTok to see if these were available in European languages.

# Findings

## Default privacy settings

The default privacy settings varied by age and country

	Germany	Slovenia	Netherlands
13year old	<p>Defaulted to private</p> 	<p>Does not allow users to choose and they are defaulted to private</p> 	<p>Defaulted to private</p> 
16year old	<p>Defaulted to public</p> 	<p>Defaulted to public</p> 	<p>Asked to choose between 'private' or 'skip'. Skip resulted in the account being public.</p> 

## Accessibility of safety centers and help tools

TikTok includes safety information in its user safety guide.<sup>4</sup> This includes:

- Instructions and guidance on how to report content including DMs and other accounts, which young people may need to do in response to and avoid unwanted content;
- Instructions and guidance around how to turn on restricted mode and parental controls; and
- Instructions on how to keep your accounts safe and private, such as password safety.

TikTok also offers a user safety center: "TikTok is a place for creativity and expression, and we offer a number of tools and controls to help you manage your experience. We recommend checking out the guides below to learn more about our approach to safety, privacy, and security on TikTok. You'll also find helpful information for parents, caregivers, and new users."<sup>5</sup> This includes privacy and wellbeing tips.

Finally, TikTok offers a youth portal:<sup>6</sup> "The Youth Portal offers both in-app tools and educational content to provide you with all the information you need to enjoy the best possible experience as part of the TikTok community."

However, these were not accessible to all young people in their first languages.

4 TikTok 2023 *User Safety* <https://support.tiktok.com/en/safety-hc/account-and-user-safety/user-safety>.

5 TikTok 2023 *Safety Centre: Guides* <https://www.tiktok.com/safety/en-gb/>

6 TikTok 2023 *Youth Portal* <https://www.tiktok.com/safety/youth-portal?lang=en>

● Evaluation of TikTok's Processes for Risks to Minors

	Tik Tok		
	User safety guides	Safety center	Youth Portal
<b>Bulgarian</b>	–	Yes	–
<b>Croatian</b>	–	Yes	–
<b>Czech</b>	Yes	Yes	–
<b>Danish</b>	–	Yes	–
<b>Dutch</b>	Yes	Yes	Yes
<b>English</b>	Yes	Yes	Yes
<b>Estonian</b>	–	Yes	–
<b>Finnish</b>	–	Yes	–
<b>French</b>	Yes	Yes	Yes
<b>German</b>	Yes	Yes	Yes
<b>Greek</b>	Yes	Yes	–
<b>Hungarian</b>	–	–	–
<b>Irish</b>	–	–	–
<b>Italian</b>	Yes	Yes	Yes
<b>Latvian</b>	–	Yes	–
<b>Lithuanian</b>	–	Yes	–
<b>Maltese</b>	–	–	–
<b>Polish</b>	Yes	Yes	–
<b>Portuguese</b>	Yes	Yes	Yes
<b>Romanian</b>	Yes	Yes	–
<b>Slovak</b>	–	Yes	–
<b>Slovenian</b>	–	–	–
<b>Spanish</b>	Yes	Yes	Yes
<b>Swedish</b>	Yes	Yes	Yes

## Conclusion

- Safety-by-design settings on TikTok do not provide best-practice privacy protections for 16-year-olds. There also appears to be a between country variation on TikTok, with 16-year-olds treated differently in different countries.
- Access to safety centers and help tools is not routinely accessible to young people in their first languages.

# VI

## Evaluation of TikTok's Ad Manager for Minors

# Evaluation of TikTok's Ad Manager for Minors

## Research questions:

- 1 Does TikTok allow ads to reach minors based on profiling?

## Methodology

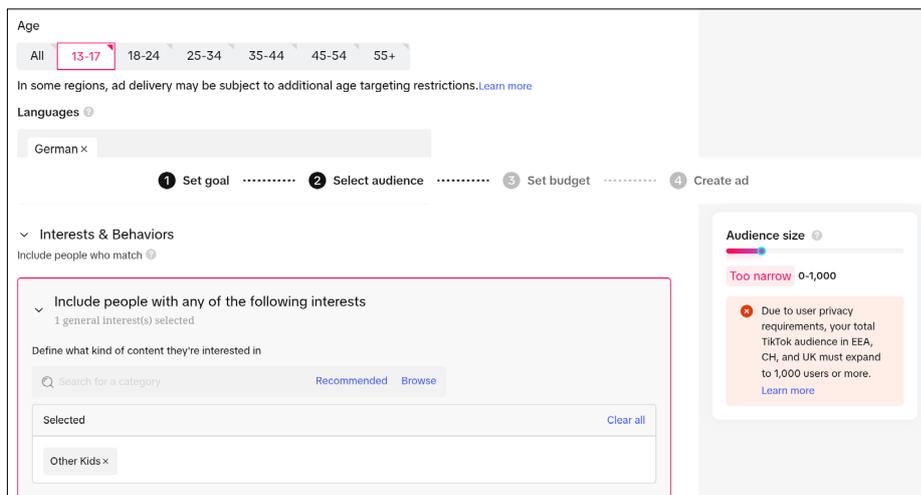
We audited TikTok's ad manager system that focuses on two aspects:

- 1 from the advertisers' perspective, what are the ad networks and ad APIs of TikTok and do they allow the possibilities of targeting minors?
- 2 from the users' point of view, what kind of age propagation takes place between a third-party application and the ad network of the platforms, and how is consent gathered or inferred from the underaged users?

## Findings

Underaged targeting by age parameter selections is not completely removed from some platforms' ad managers, such as TikTok's ad manager, Pangle.

ads.tiktok.com is the platform for the ad buy side of TikTok. Brands, shops, and other buyers can configure their ads and choose a target group. Targeting minors is not completely removed from the dashboard, even if both the age group and the "Games/Kids/Other Kids" group are shown empty (i.e., it is not possible to target either of these groups). The option "13–17" on the dashboard is present for several EU countries as well as for the UK.<sup>7</sup> This means age-related data are still being collected from EU countries for 13- to 17-year-old users. However, the ad delivery may be interfered with based on different regions' targeting restrictions.



7 The list contained: Austria, Belgium, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Kuwait, Morocco, Netherlands, Norway, Poland, Portugal, Qatar, Romania, Saudi Arabia, South Africa, South Korea, Spain, Sweden, Switzerland, Turkey, Ukraine, the United Arab Emirates, and the United Kingdom.

● Evaluation of TikTok's Processes for Risks to Minors

*Pangle*

Pangle is the sell-side software development kit (SDK) from TikTok that enables other app developers to earn money by offering ad space. Pangle states that it can deliver ads to users under 12 years of age if the content is suitable on [its global facing knowledge center](#). This does not necessarily mean that Pangle allows running ads to under 13-year-olds or minors between 13 and 17 years old within the EU. Further testing using Pangle advertising accounts or using underaged sock puppet TikTok accounts will be needed.

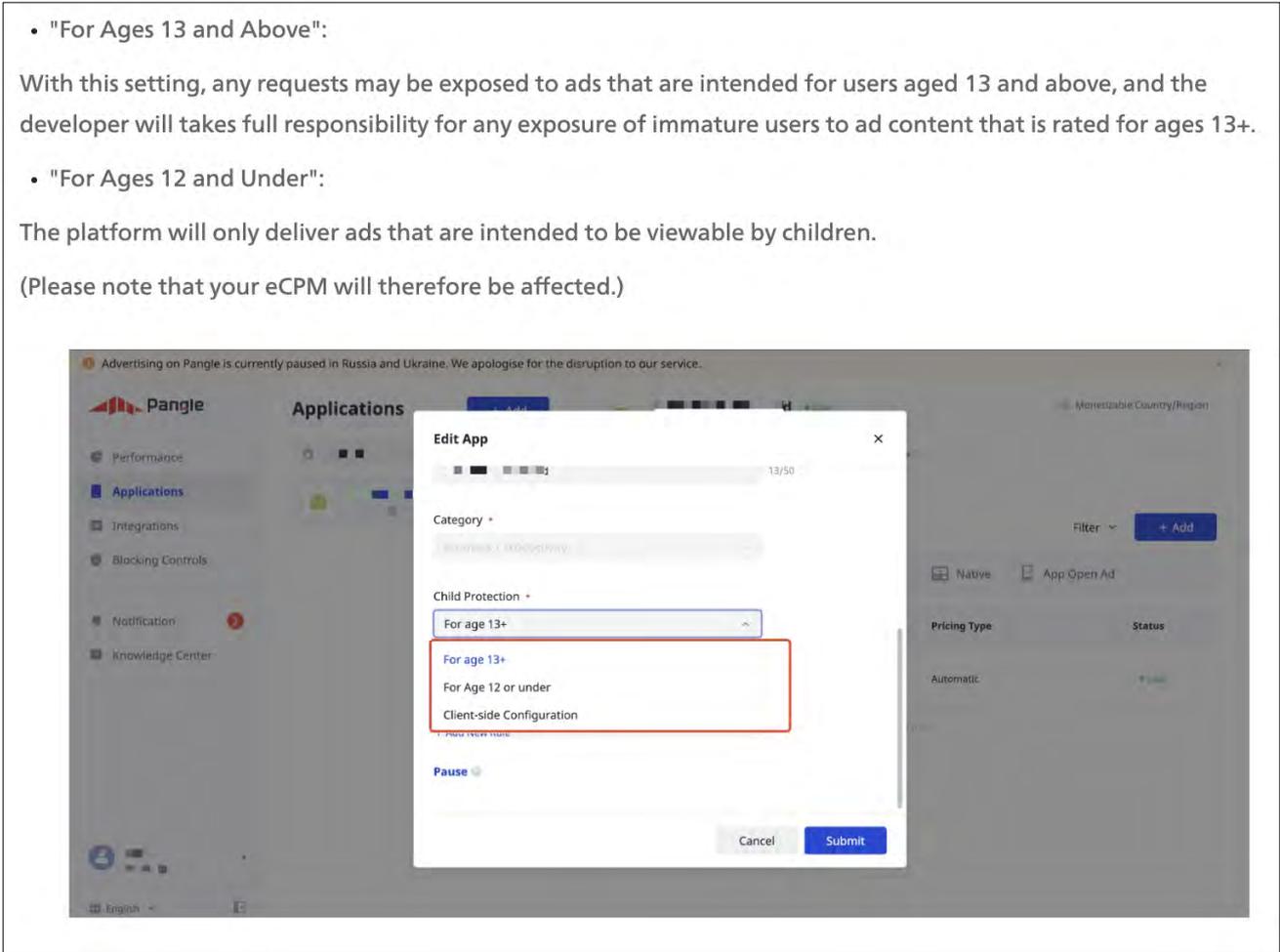
- "For Ages 13 and Above":

With this setting, any requests may be exposed to ads that are intended for users aged 13 and above, and the developer will takes full responsibility for any exposure of immature users to ad content that is rated for ages 13+.

- "For Ages 12 and Under":

The platform will only deliver ads that are intended to be viewable by children.

(Please note that your eCPM will therefore be affected.)



*Weak or no enforcement of age and data protection checks*

Pangle offers several parameters that can be set to prevent ads from being delivered to kids or without consent. When the Pangle SDK is initialized, the parameters "child", "GDPR" and "CCPA" can be set. Here is a table showing the meaning of the parameters, obtained from the handbook and the class `com.bytedance.sdk.openadsdk.api.init.PAGConfig`:

Official SDK Name	JSON variable	"0" means	"1" means
PAGChildDirectedType	coppa	adult	child
PAGGDPRConsentType	gdpr	User doesn't grant consent	User has granted the consent
PAGDoNotSellType	ccpa	"sale" of personal information is permitted	user has opted out of "sale" of personal information

## ● Evaluation of TikTok's Processes for Risks to Minors

In the source code (e.g., `com.bytedance.sdk.openadsdk.api.PAGConstant`), by default they are set to “-1” so advertisers need to manually indicate the parameter for each variable. If `coppa` is set to “1”, an error will appear, and no ads will be shown to indicate that Pangle does not facilitate ads targeting children.

However, Pangle allows advertisers to not set these parameters of age protection or consent status. For example, these parameters are not enforced while the region of the user is set to be in Amsterdam (likely by time zone). They are also not enforced when the GDPR switch is still not set (i.e., it stays “-1”). When the parameters do not indicate child protection or consent status, the configurations are nevertheless accepted by Pangle, and ads are visible in the app. App makers can thus maximise revenue by not setting the parameters and still run child-related ads without barriers from ByteDance.

### *Age verification in child-related apps containing Pangle SDK*

To confirm the low enforcement of age verification in apps containing Pangle SDK from TikTok, a randomly chosen list of 20 apps with the SDK using the Exodus Privacy database was audited. These apps can largely be deemed to be of interest to minors, such as gaming apps.

Number	App handle	Age verification?
01	<code>com.h8games.handicraft</code>	Asking if age is over 16
02	<code>com.kwalee.objecthide</code>	No
03	<code>com.BeautifullyMadeGames.ThePresident</code>	No
04	<code>jp.nanameue.yay</code>	Yes (delivering ads anyway, but didn't check if this is related to Pangle)
05	<code>com.happykamp.aquariumland</code>	Asking if age is over 16
06	<code>com.lyrebirdstudio.cartoon.face</code>	No
07	<code>com.oneway.Deathcoming</code>	No
08	<code>com.game.JewelsStar</code>	No
09	<code>com.playcus.findthedifferences2</code>	No
10	<code>com.playspare.shapesifting</code>	No
11	<code>com.bestringtonesapps.oldphoneringtones</code>	No
12	<code>com.xplay.pop_antistress_simulator</code>	No
13	<code>com.superclay.freecashknight</code>	No
14	<code>com.wordgame.puzzle.block.crush.de</code>	No
15	<code>com.StaffanEkvall.CarpetBombing2</code>	No
16	<code>com.starwavenet.memestar.gp</code>	No
17	<code>com.vector.game.puzzle.numberlink</code>	No
18	<code>net.wellyglobal.led.flashlight.torchlight.colorlight.pro</code>	No
19	<code>com.ezt.monster.playground</code>	No
20	<code>com.funcell.perfectlie</code>	Asking if age is over 16 (using several dark patterns)

This audit underlines that ad SDKs in general, and Pangle in particular, do not force the app creators to implement or use age checks of any kind.

- Evaluation of TikTok's Processes for Risks to Minors

### *Usage time and used apps data collection*

In addition, out of all the data harvested from underaged users, consent may not be explicitly obtained for certain metrics that are then usable as an API parameter on Pangle. For example, Pangle collects the usage time of apps through TikTok. This data feed may then be used to create the interest targeting that is available via the TikTok ad-selling platform (ads.tiktok.com) (see Appendix 4 on TikTok Collection of Duration of Use).

## *Conclusion*

- Underaged targeting by age parameter selections is not completely removed from TikTok's ad manager system.

# VIII

## Appendix I: TikTok's Content Moderation Guidelines

## *Appendix 1: TikTok's Content Moderation Guidelines*

### **TikTok's Community Guidelines on Suicide and or/Self-harm**

TikTok's Community Guidelines outline that the platform "Remove(s) violative content from the platform that breaks our rules."<sup>8</sup> Specifically, when it comes to suicide and self-harm material, they state that "We do not allow showing, promoting, or sharing plans for suicide or self-harm." They specifically note that they do not allow:

- Showing, promoting, or providing instructions on suicide and self-harm, and related challenges, dares, games, and pacts;
- Showing or promoting suicide and self-harm hoaxes; and
- Sharing plans for suicide and self-harm.<sup>9</sup>

They do allow sharing messages of hope and stories of personal experiences overcoming suicide and self-harm urges (if there is no mention of suicide or self-harm methods), or suicide and self-harm prevention material.

According to these guidelines, TikTok should remove violative content when they become aware of it.

<sup>8</sup> TikTok *Community Guidelines* March 2023, bullet point 1 <https://www.tiktok.com/community-guidelines/en/>.

<sup>9</sup> TikTok *Mental and Behavioural Health Guidelines* March 2023, <https://www.tiktok.com/community-guidelines/en/mental-behavioral-health/>.

## Operationalisation & Definitions for this evaluation

We did not want to include content that is limited to talking about suicide and self-harm, or to documenting the day-to-day life for people who have suicidal ideation or self-harm, nor content about struggling with or trying to stay safe while affected by ideation or self-harming, nor content about recovering after attempts or staying clean. We only included content that is explicitly pro-suicide and/or self-harm.

### **We define pro-suicide content as content that:**

- Shows, promotes or normalises the act of, or preparation for, suicide, e.g.:
  - pictures, videos, memes of people or characters engaging in suicide where there is not also content that suggests this act or preparation is regrettable (for example, images of characters hanging with nooses around their neck, or pictures of people with guns in their mouths);
  - pictures, videos, memes where people express a desire or plan to commit suicide, without expressing regret (for example, a slide show that says "I want to KMS tonight", or "I want to be dead" with associated suicide terms);
  - pictures, videos, memes about the best ways to die or funny ways to kill yourself, where the best ways to die were described or depicted in realistic terms (for example, by driving your car into a tree). This excluded examples where the best ways to die were potentially tongue in cheek, e.g. by eating too much ice cream.
- Shows, promotes or normalises suicide through humour, eg:
  - Pictures, videos or memes with comedic intent but that still depict people engaged in suicide, e.g. videos of children with toilet paper nooses around their necks hanging from a beam and jumping off a chair;
  - videos depicting the suicide of popular characters, such as Kermit the Frog hanging himself in the bathroom.

We do not include content:

- Where people express suicidal ideation but also expressed a desire not to act or wanting to seek help, e.g. posts where people say "I want to KMS, but I couldn't do it to my family", or "I think about suicide all the time, but couldn't go through with it";
- Where people expressed dark and depressing thoughts, but did not express suicidal ideation, e.g. posts where people described having nothing left to live for, or wanting to go to sleep for a very long time, without explicitly describing suicidal intent;
- Artistic materials where people expressed suicidal thoughts or ideations through art, unless it was a graphic illustration of a suicide method;
- Comedic material that was not graphic, e.g. videos or memes where people describe something cringe-worthy and then talked about wanting to kill themselves.

### **We define pro-self-harm content as content that:**

- Shows self-harm images, e.g. videos of bleeding cuts, the process of cutting or the results of cutting (e.g. bleeding arms, scenes of razors and bathrooms covered in blood, where they are associated with self-harm terms);
- Promotes or normalises self-harm, e.g. pictures, videos or memes about people who self-harm or are self-harming without context that expresses regret (for example, videos of people talking about upgrading their cutters to new, sharper blades, or images of razor blades and blood);
- Shows preparations for self-harm, e.g. images of razors with descriptions or how they were going to cut themselves, or content describing how to use particular self-harm tools;
- Memes or comedy clips that depict people engaging in self-harm, e.g. jokes about cutting yourself on your ankles so your family doesn't see cuts on your wrists.

We do not include content:

- Where people express self-harm ideation but also expressed a desire not to act or wanting to seek help, e.g. posts where people say “I’ve been clean (from cutting) for 2 days now, but it so hard to keep going”;
- Where people expressed dark and depressing thoughts, but did not express self-harm ideation, e.g. posts where people described being so sad that they can understand why others self-harm, but did not express a desire to self-harm themselves;
- Artistic materials where people depicted self-harm through art, unless it was a graphic illustration of how to cut (e.g. we did not include images or drawings made of people self-harming or the consequences of self-harm).

## TikTok’s Community Guidelines on Pro-Eating Disorder Content

TikTok’s Community Guidelines outline that the platform “Remove(s) violative content from the platform that breaks our rules”.<sup>10</sup> Specifically, when it comes to pro-restrictive eating disorder material, they state “We do not allow showing or promoting disordered eating or any dangerous weight loss behaviors.”<sup>11</sup> They describe these as:

- Disordered eating includes extreme dieting or fasting, bingeing, and intentional vomiting.
- Dangerous weight loss behaviors include compulsive exercise, and using potentially harmful medication or supplements.”

They specifically note that they do not allow:

- “Showing, promoting, or requesting coaching for disordered eating and other dangerous weight loss behaviors.
- Showing or describing extremely low-calorie daily food consumption, and diets associated with disordered eating.
- Showing or promoting unhealthy body measurement and “body checking” trends, such as comparing body part size to household objects.”

They note that they do allow “Showing or describing fitness routines and nutrition that are not primarily focused on extreme weight loss, such as preparing for competitive sports, marathon training, and body building competitions.”

According to these guidelines, TikTok should remove violative content when they become aware of it.

<sup>10</sup> TikTok *Community Guidelines* March 2023, bullet point 1 <https://www.tiktok.com/community-guidelines/en/>.

<sup>11</sup> TikTok *Mental and Behavioural Health Guidelines* March 2023, <https://www.tiktok.com/community-guidelines/en/mental-behavioral-health/>.

## Operationalisation & Definitions for this evaluation

We did not want to include content that only talks about eating disorders, or documents day-to-day life with them, nor content that about struggling with disorders or roads to recovery.

We only included content that is explicitly pro-restrictive eating disorder.

### **We describe pro-restrictive eating disorder content as content that:**

- Shows, promotes or normalises dangerous weight loss, or dangerous dieting behaviours, such as:
  - Content that focuses on or highlights bone structures, such as ribs, collar bones, thigh gaps, hips, concave stomach or protruding spine or scapulas. This includes content where people are posing or deliberately exposing body parts to highlight extreme thinness;
  - Content that depicts thigh gaps, finger gaps, or other signs of extremely low body mass;
  - Before and after weight loss content, where the after picture shows either bone structures or clinically unhealthy BMI rates;
  - Content that displays or notes BMI rates below 21, or expresses goals for BMI rates below 21;
  - Content regarding weight check ins, or that talks about Goal Weights or Ultimate Goal Weights that would be associated with an unhealthy BMI (such as content where someone describes their weight as 52kg, and their height as 5'8");
  - Showing or promoting unhealthy body measurement and "body checking" trends, such as comparing body part size to household objects;
  - Content that congratulates people for reaching an unhealthy weight, a BMI below 21 or having visible bones, or that encourages them to aspire to this;
  - Content that shows or promotes extremely low-calorie daily food consumption (less than 500 calories per meal, or 1,500 per day) when combined with eating disorder terms, and diets associated with disordered eating terms;
  - Content that congratulates people for restricting their eating to less than 500 calories per meal, or 1,500 per day or that encourages them to achieve this;
  - Content that describes having an eating disorder as a positive outcome or depicts them in a desirable light (e.g. tweets that say 'restricting is easy, will power lets me just eat water').

We do not include content:

- Content that depicts bone structures, thigh gaps or BMIs in association with text or images that describe wanting to recover or gain weight;
- Content that depicts bone structures, thigh gaps or BMIs where associated content (terms etc) indicated that the person in the picture was trying to put on weight or otherwise documenting a successful recovery;
- Content that just features extremely skinny people, who may or may not be affected by restrictive eating disorders, who are just documenting their lives (such as playing guitar, on on a walk), where the content does not explicitly centre around their weight or include associated terms. This does not include images where people are deliberately posing and focusing on their visible bone structures, or thigh gaps etc
- Recovery diaries or recovery stories;
- Content that talks about the difficulties of having a restrictive eating disorder, or talked about day-to-day issues (e.g. memes about going to the fridge, losing will power, and eating 1000 calories every night, where it was unclear from the meme if that was all they ate during the day or just a daily 'snack' they regret);

● Evaluation of TikTok's Processes for Risks to Minors

- Content that depicts bone structures, thigh gaps or BMIs in a medical or humanitarian context (e.g. documenting a famine or person ill from non-eating disorder diseases);
- Low calorie diet content that does not include eating disorder terms, such as for content associated with 'diabetes friendly' diets, or general weight loss diets
- Images of professional athletes, such as ultra marathon runners or ballerinas;
- Exercise 'for weight loss' content.



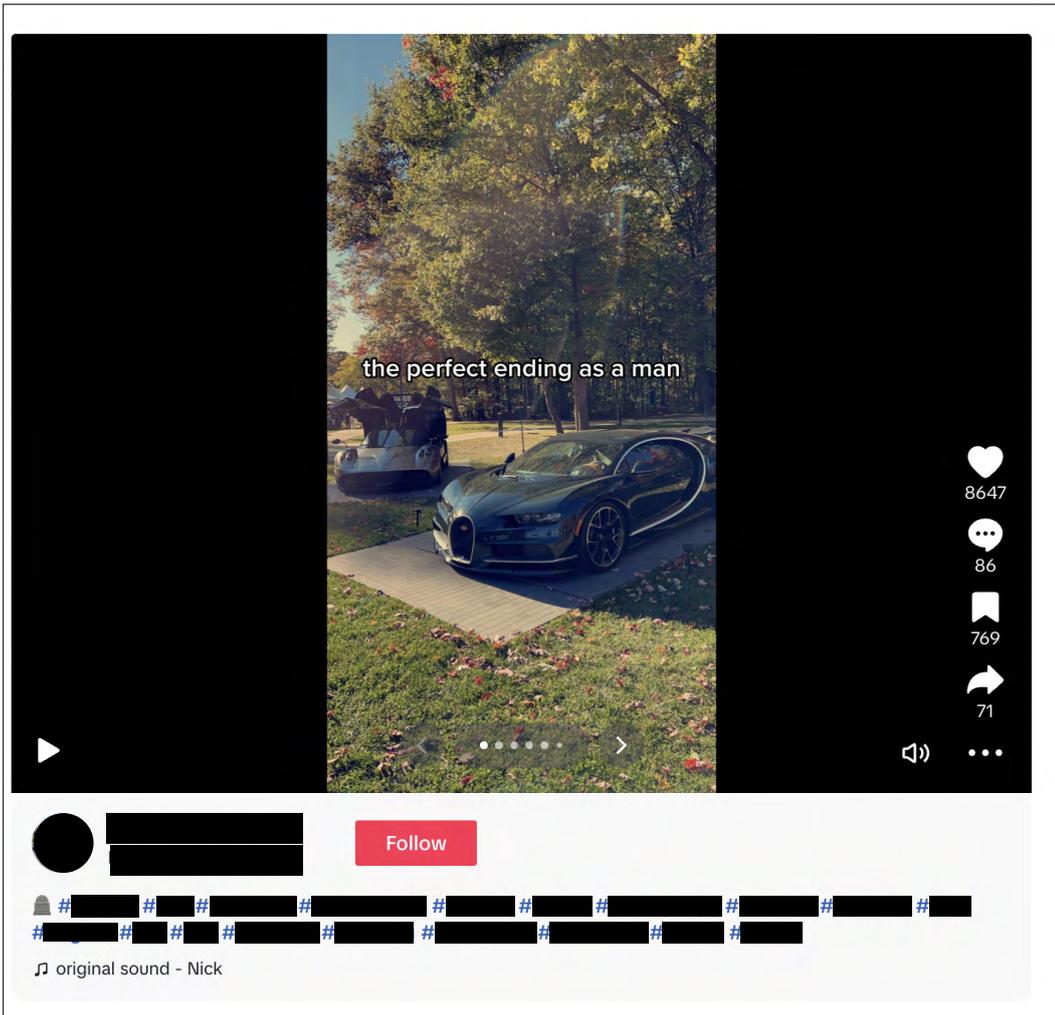
TRIGGER WARNING  
& VIEWER DISCRETION  
ADVISED

# VIII

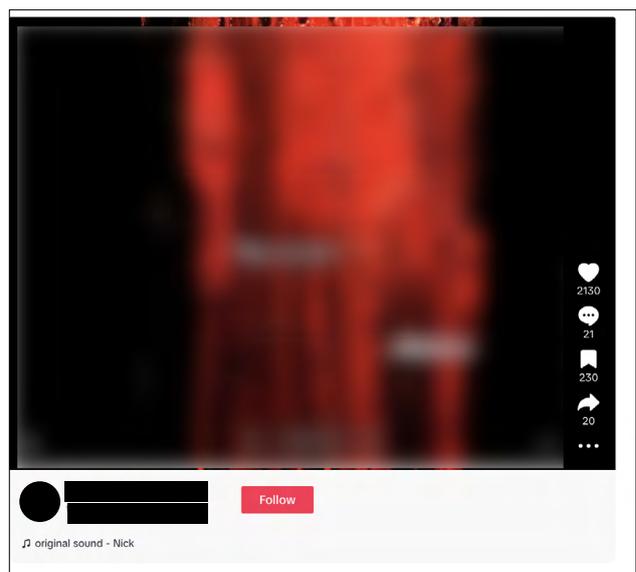
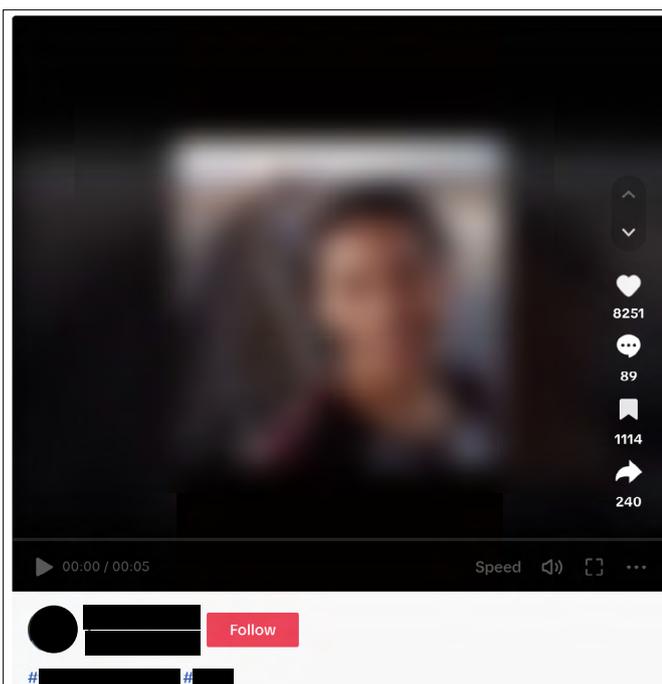
## Appendix II: Examples of TikTok's Content Monitored

● Evaluation of TikTok's Processes for Risks to Minors

*Pro-suicide and/or self-harm content*

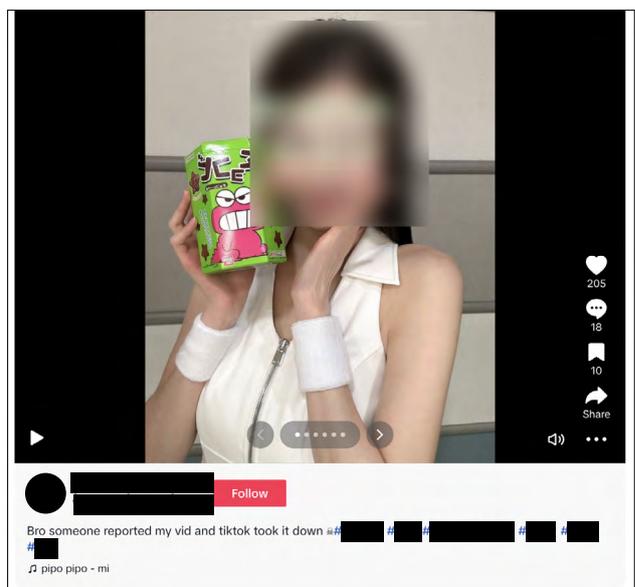
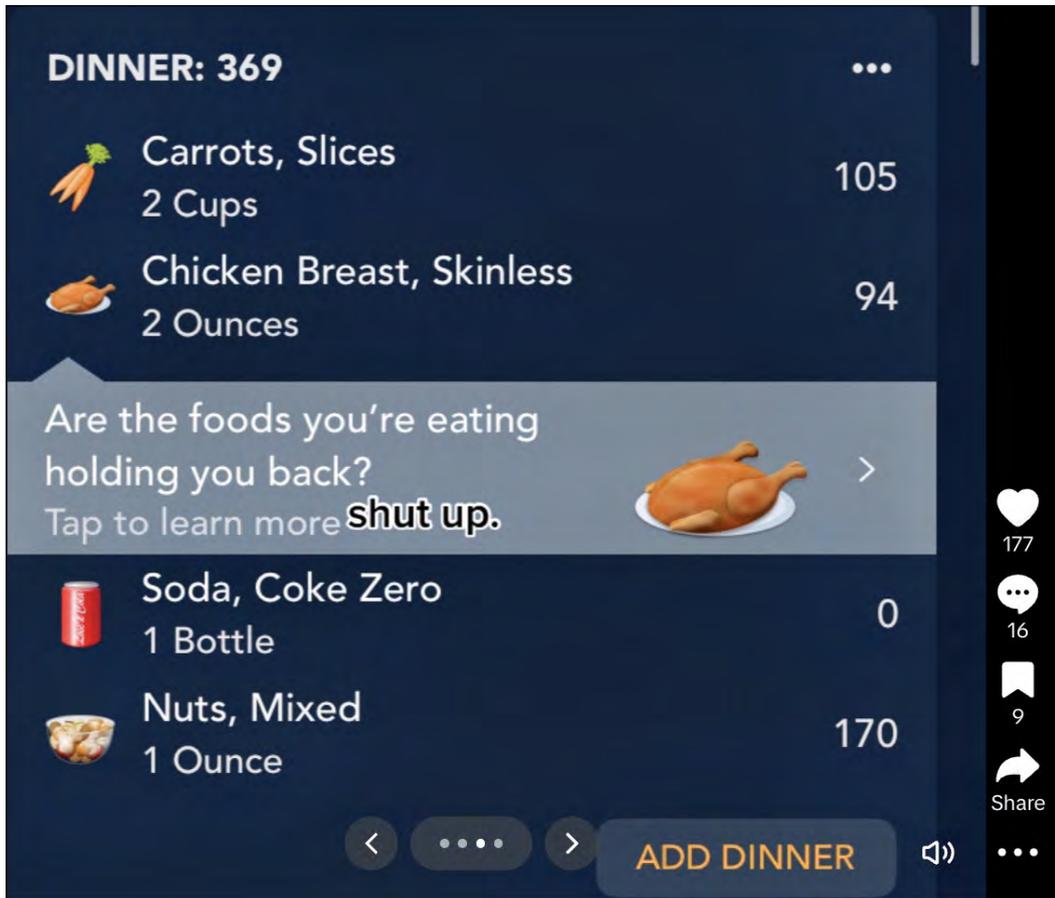


Aslide show highlighting the perfect ways to end it as a man, featuring multiple images of car crashes



● Evaluation of TikTok's Processes for Risks to Minors

*Pro-restrictive eating disorder content*



Reset.

# VIII

## Appendix III: TikTok's Sign-on Process

## ● Evaluation of TikTok's Processes for Risks to Minors

We have broken down TikTok's sign-on process on a mobile app into 11 steps:

- 1 The app asks the new user to Sign Up for TikTok: The App asks you to select your methods (i.e., "Use phone or email" or "continue with Facebook"). At the bottom of the screen in small grey font, it says "By continuing, you agree to our Terms of Service and acknowledge that you have read our Privacy Policy to learn how we collect, use, and share your data and our cookies policy to learn how we use cookies." They inferred consent by selecting how you would like to sign up.
- 2 Variable depending on the country: When the user selects a method to sign on in step 1—we chose via phone for this research—the app asks for the details (e.g., phone number or email address). The app notifies the user in small grey font "Your phone number may be used to connect you to people you may know, improve ads, and more, depending on your settings. Learn more." It offers a link to learn more. There is a red "send code" button at the bottom of the screen that becomes usable once a valid phone number is entered. In Germany for example, this is step 3.
- 3 Variable depending on the country: The app then asks the user to enter a 6-digit code, explaining that "Your code was sent to [phone number entered in step 2]." Once this is entered, the app automatically skips to the next step. In Germany for example, this is step 4.
- 4 Variable depending on country: The app then asks the new user to enter their birthday. In small grey font, the app explains that "Your birthday won't be shown publicly." A next button appears at the bottom that is only useable once the user has entered their date of birth. In some countries this is step 4, in other countries such as Germany, this is step 2.
- 5 The app then asks the user to create a password. In small grey font, it provides some instructions, such as "8 characters (20 max)." A "Next" button appears at the bottom that is only usable once the user has created their password.
- 6 The app then asks the user to create a nickname: In small grey font, the app explains "This can be anything you like and can be changed later. If you skip this step, you will automatically be assigned a default nickname." A confirm button appears at the bottom that is only useable once the user has created their nickname.
- 7 Variable depending on the country: TikTok advises the user to turn on notifications, displaying a message in the background that says, "To stay on top of likes, comments, the latest videos, and more, allow TikTok to send you notifications." While this message is displayed in the background, the user's phone displays a notification that "TikTok would like to Send You Notifications." It explains in smaller font that "Notifications may include alters sounds and icon badges. These can be configured in Settings." The notification offers two choices, "Don't allow", or "Allow." Allow is in bold and promoted. This step only appeared in the Netherlands for 13-year-olds. It also appears in UK and US accounts.
- 8 The app then asks the user to: "Choose your interests" to "get better video recommendations." This provides the new user with a range of options to choose from, such as "beauty and fashion" and "football." This provides the users with a choice to "Skip" or "Next." Next is not functional unless the user selects an interest.
- 9 Variable depending on the country: It then links to a section called Privacy Highlights for Teens with seven short videos offered:
  - a. Privacy Highlights for Teens - 0:25
  - b. The Information We Collect - 1:47
  - c. How We Use Your Information - 0:29
  - d. Your Information and Our Community Guidelines - 0:52
  - e. Your Information and For You Feed - 1:14
  - f. Your Information and Other Organizations - 1:30
  - g. Controlling Your Information - 1:47
  - h. TikTok for Teens - 4:06

## ● Evaluation of TikTok's Processes for Risks to Minors

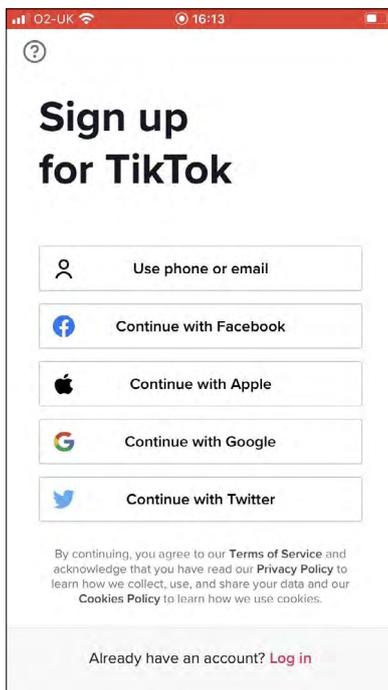
Below these videos, there is a red, promoted "Next" button. It is functional at any point, and the user does not have to watch any videos to move to the next step. These videos were not offered in, for example, the German sign-on procedure.

- 10 The app then takes the user through to content they can swipe through, which functions as a mini tutorial explaining how a user can "Swipe up for more." Once a user Swipes up, they are taken to the next step.
- 11 The app then requests access to the user's contacts. The user's phone displays a notification that "TikTok would like to access your contacts." The text explains "Sync your contacts to easily find people you know on TikTok. Your contacts will only be used to help you connect with friends." This offers two choices, "Don't allow" and "OK". OK is the promoted option.

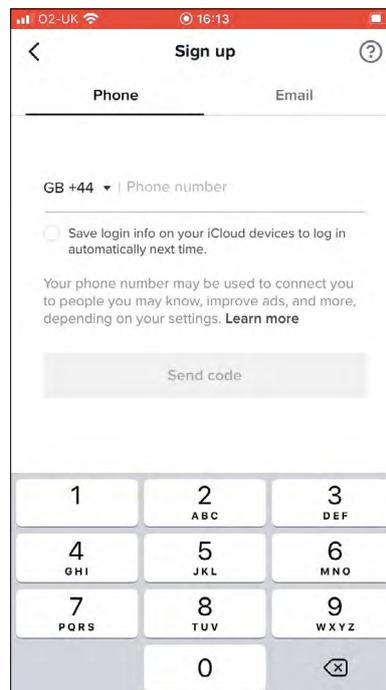
The new user is then taken to their "For You" feed.

### Steps in images

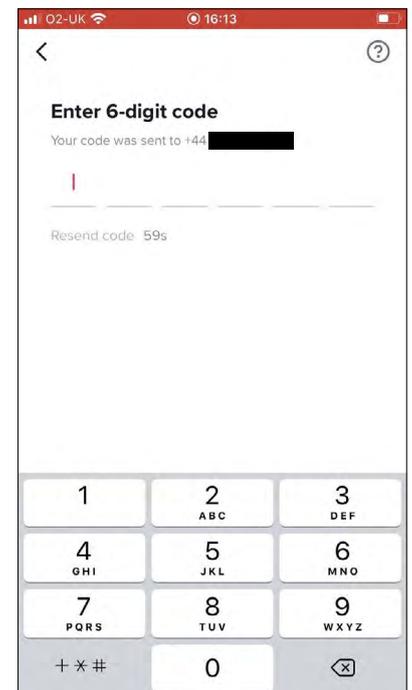
#### Step 1



#### Step 2



#### Step 3



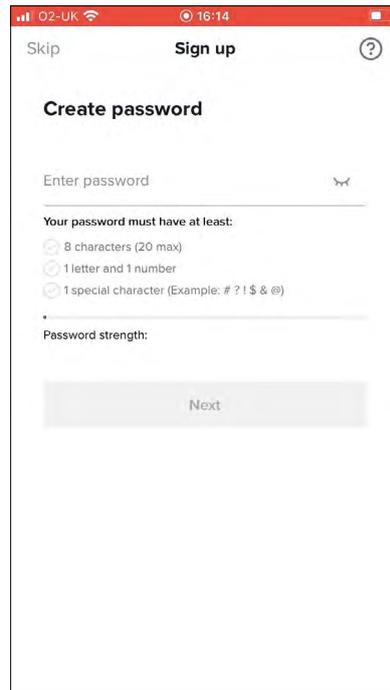
**Note: Inferring consent by selecting which method to sign up with.** This also demonstrates **obscuring details about terms and conditions**, where the agreements are presented in the smallest grey font at the bottom of the screen.

● Evaluation of TikTok's Processes for Risks to Minors

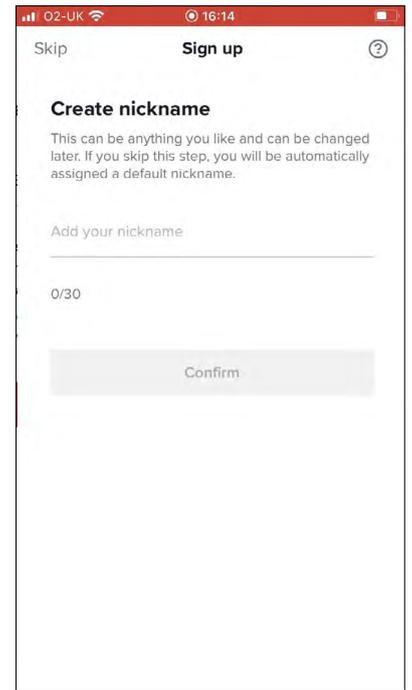
Step 4



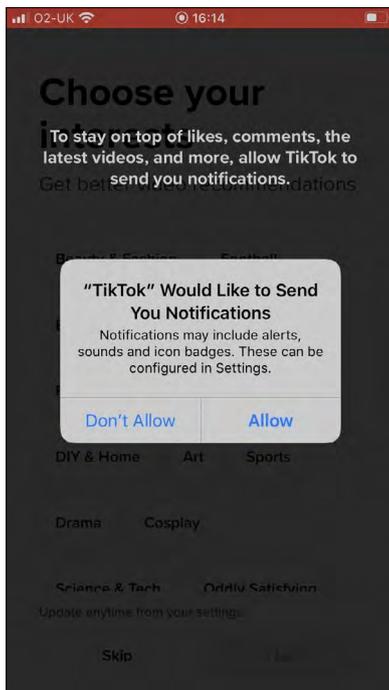
Step 5



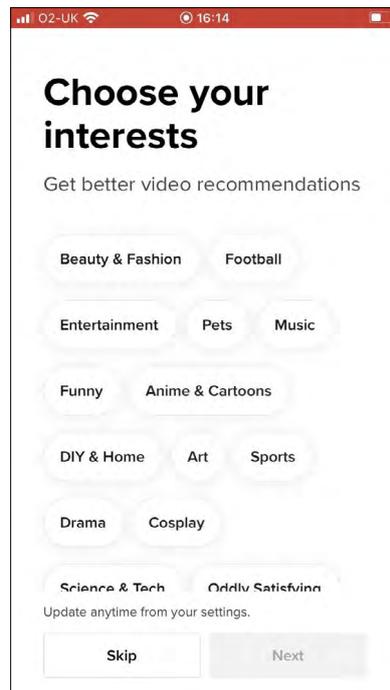
Step 6



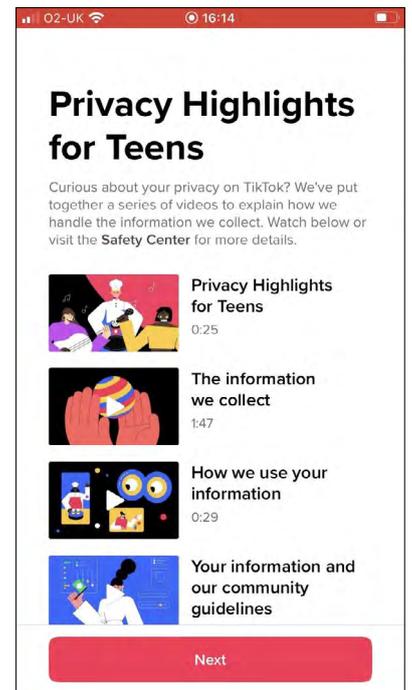
Step 7



Step 8



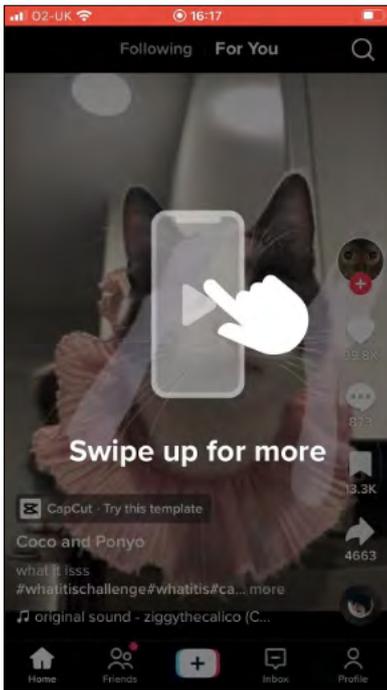
Step 9



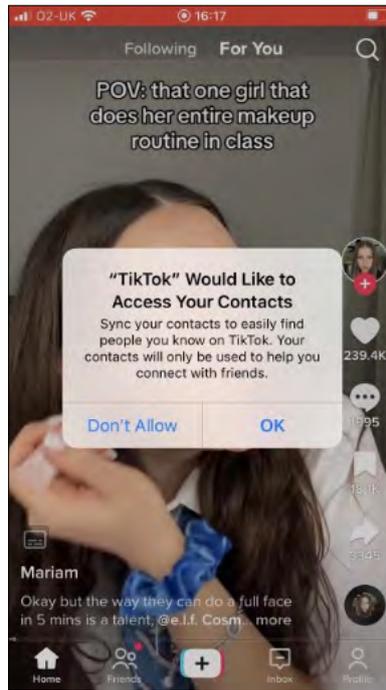
Note: Presenting options that may not be in a user's best interests a "better user experience." Note the positive framing and instruction to allow notifications from TikTok. Also, visual promotion of options that are in a platform's best interests, while demoting options that are in the user's best interests. "Allow" is bolded.

● Evaluation of TikTok's Processes for Risks to Minors

Step 10



Step 11



Note: Visual promotion of options that are in a platform's best interests, while demoting options that are in the user's best interests. "OK" is bolded.

Policies referenced in the sign-up process:

1. Terms
2. Privacy Policy
3. Cookie Use

# VIII

## Appendix IV: TikTok Collection of Duration of App Use

## Appendix IV: TikTok Collection of Duration of App Use

```
[API_Monitor]
{
  "category": "JSON",
  "class": "org.json.JSONObject",
  "method": "put",
  "args": "[\"stats_list\", \"<instance: java.lang.Object, $className: org.json.JSONArray>\"]",
  "returnValue":
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}
```