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2020 Technical Report: a Review of Age Verification Mechanism for 10 Social Media Apps

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Funder: CyberSafeIreland



Technical Report

A Review of Age Verification Mechanisms for 10 Social Media Apps

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May 2020

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Introduction

This study presents an analysis of the age verification mechanisms in place for 10 popular social media apps used by children: Snapchat, Instagram, TikTok, Viber, Skype, Facebook, HouseParty, Discord, Messenger, WhatsApp. According to CyberSafeIreland, these are the apps most used by younger children, including underage children, i.e. below the age of 13 which is defined as the minimum age for use of such services (16 years in the case of WhatsApp).

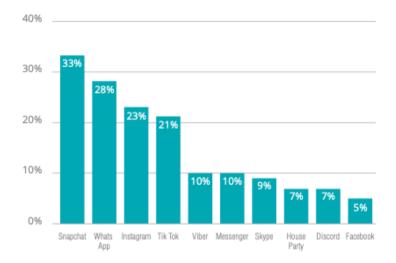


Figure 1: Top Ten Apps used by Children, Aged 8-13 years
Source: CyberSafeIreland, Annual Report 2019.

Data collected from CyberSafeIreland's annual survey of children's use of social media shows that Snapchat was the most popular app in 2018/19 with 33% of children, aged 8-13, using it. WhatsApp is the second most popular app with this age group with 28% of 8-13 year old children using it. Instagram is used by 23% of children in this bracket while TikTok (formerly known as Musical.ly) is used by 21% and is the 4th most popular app with 8 – 13 year age bracket. All of the online services in this group have a minimum age restriction of 13, with the exception of WhatsApp, which has an age restriction of 16, as laid out in their terms and conditions.

The purpose of this study was to test of the robustness of the age verification mechanisms deployed by these services. The test protocol involved asking the following 8 questions for each service:

- 1. What is the minimum age stated in the terms of use?
- 2. Is this the same across all EU countries?
- 3. Does the service ask for your age on signup?
- 4. If so, what happens if you enter age 12?
- 5. If you enter age 13, are there any additional verification processes (e.g. emailing a parent)?
- 6. Can you easily bypass these verification processes? (Do you get access anyway?)
- 7. If you enter age 16 on signup, is there any attempt at verification?
- 8. At any point is the minimum age made clear to the user?

Data was collected by testing the user sign up processes for users aged 12, 13 and 16. Each of the 10 apps was installed on a new Nokia 2.3 smartphone. Testing involved signing up to each app, providing a date of birth when requested that suggested each of the three ages specified above. In a few cases, it was necessary to clear the cache or reinstall the app to begin the process again for the next user age. In one case, it was necessary to install the app on a different device an iPhone SE smartphone, as the app (TikTok) blocked the user from signing in after an attempt to sign in as an underage user. Terms of Use were acquired from the settings of each app and also online on the respective websites for each app. In the latter case, an Apple MacBook Pro was used to download the Terms of use A summary of findings is presented for each social media service with detailed notes and screenshots resulting from the tests undertaken.

The study was undertaken in April and May 2020 and was a repetition of tests originally undertaken in 2019. The original research was commissioned by CyberSafeIreland and was developed by Liliana Pasquale, Lecturer (Assistant Professor) School of Computer Science, UCD and Paola Zippo, UCD Visiting Masters Student from Politecnico di Bari (Italy).

1. SNAPCHAT



Testing Summary

Table 1: Test Summary for Snapchat

ANSWER
13
Yes
Yes
User is not allowed to set up an account
No
Yes
No
Yes

Detailed Notes and Screenshots

1. What is the minimum age stated in the terms of use?

Terms of Service are mentioned although not explicitly presented to the user during the signup process. US and Non-US Terms of Service are available in the app if the user

goes looking. The non-US Terms of Service shown in Figure 1 state that 13 is the minimum age.

Terms of Service

1. Who Can Use the Services

No one under 13 is allowed to create an account or use the Services. We may offer additional Services with additional terms that may require you to be even older to use them. So please read all terms carefully.

Figure 1: Terms of Service for Snapchat

Privacy Policy

The Privacy Policy shown in Figure 2 states that functionality may be restricted for 13-16 year olds and that parental consent may be requested if they are processing the data in a normal way. There is no information on what, if any, functionality is restricted. **This would be a good area for further research.**

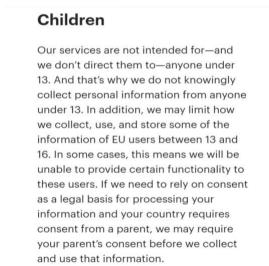


Figure 2: Snapchat Privacy Policy

2. Is this the same across all EU countries?

Yes. The minimum age of 13 applies to all countries outside the United States. There are two Terms of Use, one for the United States, and one for outside of the United States as shown in Figure 3.

◀ Terms of Service

Snap Group Limited Terms of Service

(If you live outside the United States) Effective: October 30, 2019

Figure 3: Terms of Service for Snapchat outside of the US

3. Does the service ask for your age on signup?

Age is requested early in the process. This is on the second screen after clicking on sign up.

4. If so, what happens if you enter age 12?

If the user enters an age that is less than 13, a message is presented as per Figure 4 that shows they are not eligible. On clicking OK, the user is returned to the signup screen.



Figure 4: Message declining account setup on Snapchat

5. If you enter age 13, are there any additional verification processes (e.g. emailing a parent)?

When the user enters an age of 13, they are allowed to continue, there are no additional processes such as obtaining parental consent. There are no messages relating to restricted content or data processing. The account is successfully opened.

6. If you enter age 16 on sign up, is there any attempt at verification?

There are no additional verification processes or any attempts to get parental consent even if the user enters age 13. Users can bypass the age under 13 age restriction simply by lying about their age.

7. At any point is the minimum age made clear to the user?

When the user enters an age of 16, they are allowed to continue and set up the account.

8. At any point is the minimum age made clear to the user?

Yes. If a user enters an age under 13, they are not allowed to continue. Also, it is explicitly stated in the Terms of Service.

2. INSTAGRAM



Testing Summary

Table 2: Test Summary for Instagram

QUESTION		ANSWER
1. What is the minin	num age stated in	13
the terms of use?		
2. Is this the same	e across all EU	Yes
countries?		
3. Does the service as	sk for your age on	Yes
signup?		
4. If so, what happen	s if you enter age	User is not allowed to set up an account
12?		
5. If you enter age	13, are there any	Yes.
additional verificat	ion processes (e.g.	
emailing a parent)?	,	
6. Can you easily	bypass these	Yes
verification proces	ses? (Do you get	
access anyway?)		
7. If you enter age 16	on signup, is there	No
any attempt at verif	fication?	
8. At any point is t	he minimum age	Yes
made clear to the u	ser?	

Detailed Notes and Screenshots

1. What is the minimum age stated in the terms of use?

Terms of Service are linked from the sign up page although not explicitly presented to the user during the signup process. The minimum age is given as 13 as can be seen in Figure 5.

← Terms of Use

Who Can Use Instagram. We want our Service to be as open and inclusive as possible, but we also want it to be safe, secure, and in accordance with the law. So, we need you to commit to a few restrictions in order to be part of the Instagram community.

• You must be at least 13 years old.

Figure 5: Terms of Use of Instagram

2. Is this the same across all EU countries?

Terms of Use in the app and online are not specific to different countries. The minimum age is therefore consistent across Europe. Although there appears to be a requirement for Spanish users of Facebook to be 14 years old (see Figure 33), it is not clear if this applies to Instagram.

3. Does the service ask for your age on signup?

You must enter your birthday during the signup process, as per Figure 6.

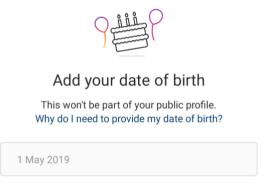


Figure 6: Instagram sign up screen

4. If so, what happens if you enter age 12?

If the user enters an age of 12, they receive a message as shown in Figure 7 barring them from downloading the app. They are then redirected to the signup page.

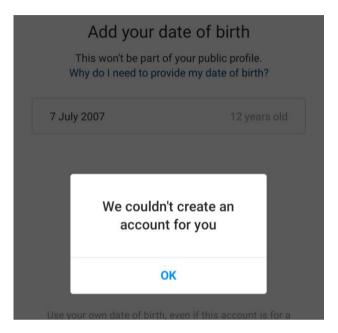


Figure 7: Message declining account setup on Instagram

5. If you enter age 13, are there any additional verification processes (e.g. emailing a parent)?

If the user enters an age of 13, they are asked to gain parental consent via email or Facebook. This can be skipped, as can be seen in Figure 8.

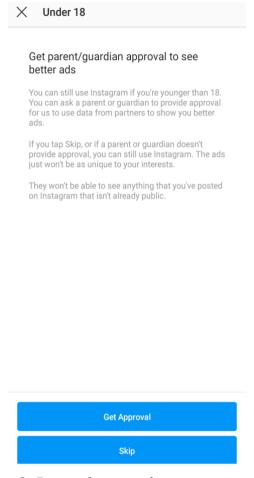


Figure 8: Parental approval request screen on Instagram

- 6. Can you easily bypass these verification processes? (Do you get access anyway?)

 It is easy to bypass by clicking SKIP or just restarting and entering an age above 16.
- 7. If you enter age 16 on signup, is there any attempt at verification? If the user enters age 16 on signup, there is no additional verification process.
- 8. At any point is the minimum age made clear to the user?

The minimum age of 13 is made clear in the Terms of Use and is made clear on signup if you enter a younger age.

3. TIKTOK



Testing Summary

Table 3: Test Summary for TikTok

QUESTION	ANSWER
1. What is the minimum age stated in	13
the terms of use?	
2. Is this the same across all EU	Yes
countries?	
3. Does the service ask for your age on	Yes
signup?	
4. If so, what happens if you enter age	User is not allowed to set up an account
12?	
5. If you enter age 13, are there any	No
additional verification processes (e.g.	
emailing a parent)?	
6. Can you easily bypass these	No
verification processes? (Do you get	
access anyway?)	
7. If you enter age 16 on signup, is there	No
any attempt at verification?	
8. At any point is the minimum age	Yes
made clear to the user?	

Detailed Notes and Screenshots

1. What is the minimum age stated in the terms of use?

The minimum age stated in the T&Cs is 13 as per Figure 9

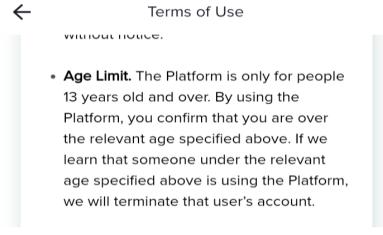


Figure 9: Terms of Use for TikTok

2. Is this the same across all EU countries?

The T&Cs are used across the EEA and Switzerland as can be seen in Figure 10

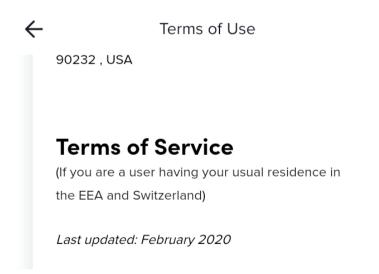


Figure 10: Geographical reach of Terms of Service

3. Does the service ask for your age on signup?

The user is asked to enter their birthday, as can be seen in Figure 11.

< Sign up

When's your birthday?

Providing your date of birth allows us to make sure that you are old enough to use TikTok.

Figure 11: Request for DoB in TikTok signup process

4. If so, what happens if you enter age 12?

The user gets a message stating they are not eligible to sign up as can be seen in Figure 12

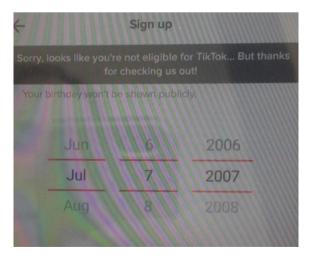


Figure 12: Message declining account setup on Tiktok

5. If you enter age 13, are there any additional verification processes (e.g. emailing a parent)?

If the user enters age 13, there are no additional verification processes

6. Can you easily bypass these verification processes? (Do you get access anyway?)

As can be seen in Figure 13, if the user previously entered age 12, they will be presented a message stating that they are ineligible to sign up, even if they now give an age of 13 or older.

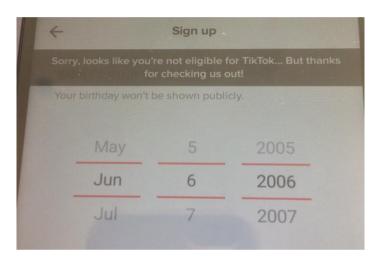


Figure 13: Message declining account setup on TikTok for a 13-year-old where they previously entered an age of 12

This is tied to the device. A user would have to either provide proof of age to TikTok support or sign up on another device. However, if the user enters an age of 13 from the start, they will be able to sign up simply by lying about their age

7. If you enter age 16 on signup, is there any attempt at verification?

If a user enters 16 when first signing up, there are no verification processes and they will successfully sign up (unless they previously entered an age under 13)

8. At any point is the minimum age made clear to the user?

Yes. It is made clear in the T&Cs and by asking for a birthdate.

4. VIBER

Testing Summary



Table 4: Test Summary for Viber

QUES	TION	ANSWER
1.	What is the minimum age stated in	13
	the terms of use?	
2.	Is this the same across all EU	Yes
	countries?	
3.	Does the service ask for your age on	Yes
	signup?	
4.	If so, what happens if you enter age	Not possible to select
	12?	
5.	If you enter age 13, are there any	No
	additional verification processes (e.g.	
	emailing a parent)?	
6.	Can you easily bypass these	Yes
	verification processes? (Do you get	
	access anyway?)	
7.	If you enter age 16 on signup, is there	No
	any attempt at verification?	
8.	At any point is the minimum age	Yes
	made clear to the user?	

Detailed Notes and Screenshots

1. What is the minimum age stated in the terms of use?

The minimum age stated in the Terms of Service is 13. However, Viber also states that data of 13 to 16 year olds will be treated differently in the EEA (Figure 14). Parental

consent is required in writing to bypass this. Further research is needed to capture the variances in privacy settings for 13-15 year olds and for 16+ year olds.

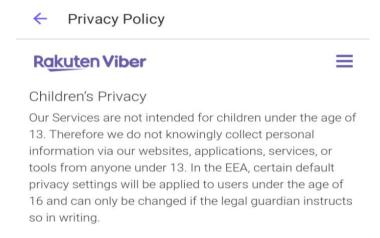


Figure 14: Viber Privacy Policy

2. Is this the same across all EU countries?

The same terms of service are used across the EEA and elsewhere.

3. Does the service ask for your age on signup?

The application requests you to enter your birthdate as can be seen in Figure 15



Figure 15: Request for birth date on Viber sign up screen

4. If so, what happens if you enter age 12?

It is not possible to select a date that is less than 13 years ago as shown in Figure 16. This was attempted on May 4th 2020. The latest date that a user could select is May 4th 2007.



Figure 16: Viber signup screen date selection

5. If you enter age 13, are there any additional verification processes (e.g. emailing a parent)?

No additional verification processes for age 13-15. However extra privacy settings are set for this age group by default. This can only be bypassed by a parent writing with consent.

6. Can you easily bypass these verification processes? (Do you get access anyway?)

Yes, the user can just lie about their age and say that they are 13 or older.

7. If you enter age 16 on signup, is there any attempt at verification?

There is no attempt to verify age if the user enters age 16

8. At any point is the minimum age made clear to the user?

Yes. In the Terms of Service and also by greying out DoBs that would indicate an age below 13.

5. SKYPE



Testing Summary

Table 5: Test Summary for Skype

QUES	TION	ANSWER
1.	What is the minimum age stated in	None
	the terms of use?	
2.	Is this the same across all EU	Yes
	countries?	
3.	Do they ask for your age on signup?	Yes
4.	If so, what happens if you enter age	You are allowed to continue but you are
	12?	required to get parental consent via email
5.	If you enter age 13, are there any	Yes.
	additional verification processes (e.g.	
	emailing a parent)?	
6.	Can you easily bypass these	Yes
	verification processes? (Do you get	
	access anyway?)	
7.	If you enter age 16 on signup, is there	No
	any attempt at verification?	
8.	At any point is the minimum age	No
	made clear to the user?	

Detailed Notes and Screenshots

1. What is the minimum age stated in the terms of use?

The Terms of Use do not specifically refer to minimum age but this Support Page on the Microsoft website shown in Figure 17 outlines that a minimum age of 13 applies.

What security measures do you have in place to help protect children on Skype?

Skype's websites and software are not intended for or designed to attract users under the age of 13. We encourage parents to be involved in the online activities of their children to make sure that no information is collected from a child without parental permission.

Figure 17: Skype Terms of Use

2. Is this the same across all EU countries?

Terms of Use are global, as is the support page shown in Figure 17.

3. Do they ask for your age on signup?

The user is asked for their age, and also the country in which they live, during sign up as shown in Figure 18.

Microsoft services have age requirements based on where you live. To keep your account in good standing, we require your date of birth. Date of birth 7 July Country/region Ireland Cancel Next

Figure 18: Request for birth date on Skype sign up screen

4. If so, what happens if you enter age 12?

If a user enters an age of 12, they are allowed to continue but are required to get parental consent as shown in Figure 19.

Based on your age, your parents will have to help you out and finish your account setup. Send them an email, or get them to sign in now. Enter their email address My parent can sign in now I'm an adult, why am I seeing this? Learn more about parental consent

Figure 19: Parental consent page on Skype signup screen

Once an email address has been entered. The owner of that email address will get an email and be asked to follow a link, as per Figure 20 below.

Since your child is under 16, they need your help and consent to set up their Microsoft account. You'll need to sign in on the next screen to get started.

Let's go >

Figure 20: Email from Skype to parent requesting consent for their child

After the parent clicks on the link, they are asked to sign into a Microsoft account as shown in Figure 21.

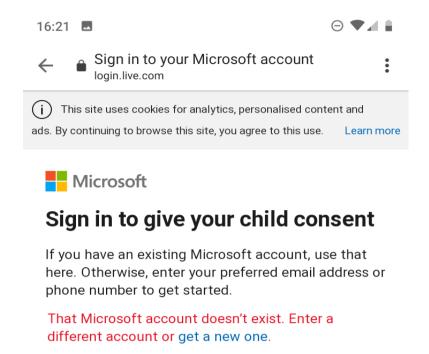


Figure 21: Sign in page for parent consenting to child using Skype

5. If you enter age 13, are there any additional verification processes (e.g. emailing a parent)?

If a child enters age 13, and selects Ireland as the country, they are still required to obtain parental consent via email, as per point 4 above.

6. Can you easily bypass these verification processes? (Do you get access anyway?)

A child can easily bypass this parental consent process by choosing to update their Date of Birth. They do not need to exit the process to do this as can be seen in Figure 22.

Your account shows you're underage

If you're an adult and seeing this by mistake, update your date of birth. Otherwise, you'll need to sign in with a different Microsoft account.

Sign in with another account

Update date of birth

Figure 22: Option to update birth date instead of obtaining parental consent on Skype

7. If you enter age 16 on signup, is there any attempt at verification?

No additional verification process is required if a user enters age 16 with country Ireland.

8. At any point is the minimum age made clear to the user?

The minimum age is not stated in the terms and conditions and as user is not barred from signup (with parental consent) at age 12, it is not suggested during the signup process either.

6. FACEBOOK

Testing Summary



Table 6: Test Summary for Facebook

QUESTI	ION	ANSWER
1. W	That is the minimum age stated in	13
th	ne terms of use?	
2. Is	this the same across all EU	No, Spain has minimum age 14
co	ountries?	
3. De	oes the service ask for your age on	Yes
sig	gnup?	
4. If	so, what happens if you enter age	User is not allowed to set up an account
12	2?	
5. If	you enter age 13, are there any	No
ad	dditional verification processes (e.g.	
en	mailing a parent)?	
6. Ca	an you easily bypass these	Yes
ve	erification processes? (Do you get	
ac	ccess anyway?)	
7. If	you enter age 16 on signup, is there	No
an	ny attempt at verification?	
8. At	t any point is the minimum age	Yes
m	nade clear to the user?	

Detailed Notes and Screenshots

1. What is the minimum age stated in the terms of use?

The Terms of Use state that a person must be at least 13 years old to create a Facebook account, as can be seen in Figure 23.

We try to make Facebook broadly available to everyone, but you cannot use Facebook if:

• You are under 13 years old.

Figure 23: Terms of Use for Facebook

2. Is this the same across all EU countries?

The minimum age for creating an account on Facebook is the same for all EU countries, with the exception of Spain as shown in Figure 24. Spanish users must be at least 14. This is outlined separately on the help page at the following link: https://www.facebook.com/help/100532533374396?helpref=search&sr=1&query=age %20spain&search_session_id=646b94cdf1acb574687000ab5ac68310

In most jurisdictions, Facebook requires everyone to be at least 13 years old before they can create an account. We strive to create a global community with consistent standards for everyone, but we also strive to respect local laws. In observance of laws in South Korea and Spain, we require anyone living in these countries to be at least 14 years old before they can create an account.

Figure 24: Facebook Support webpage outlining minimum age in Spain

3. Does the service ask for your age on signup?

The user is asked for their date of birth during the signup process as seen in Figure 25.



Figure 25: Request for Date of Birth on Facebook sign up screen

4. If so, what happens if you enter age 12?

If the user enters a DoB which suggests an age of 12, they are refused a Facebook account, as shown in Figure 26.

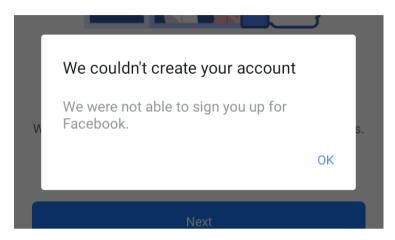


Figure 26: Message declining account setup on Facebook

5. If you enter age 13, are there any additional verification processes (e.g. emailing a parent)?

If a user attempts to sign up with an age of 13, you are allowed to create an account. There are no additional verification processes

6. Can you easily bypass these verification processes? (Do you get access anyway?)

It is easy for a user to bypass any verification processes by simply starting the process again and lying about their age.

7. If you enter age 16 on signup, is there any attempt at verification?

There is no attempt at age verification if the user enters age 16.

8. At any point is the minimum age made clear to the user?

The minimum age is made clear in the Terms of Use and also during signup if you enter an age below 13.

7. HOUSEPARTY

Testing Summary



Table 7: Test Summary for Houseparty

ANSWER
13
Yes
Yes
User is not allowed to set up an account
No
Yes
No
Yes

Detailed Notes and Screenshots

1. What is the minimum age stated in the terms of use?

Minimum age is set out in the terms of use as 13, as shown in Figure 27

Children's Privacy

Figure 27: Terms of Use for HouseParty

2. Is this the same across all EU countries?

The Terms of Use are the same for all countries.

3. Does the service ask for your age on signup?

A DoB is requested as part of the signup process as can be seen in Figure 28

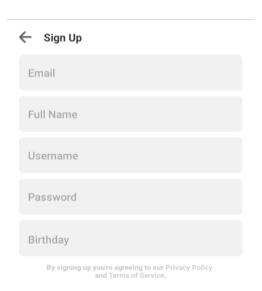


Figure 28: Signup screen for HouseParty

4. If so, what happens if you enter age 12?

If the user enters an age of 12, they will not be allowed to sign up and will be presented with the message shown in Figure 29.



Figure 29: Message received on House Party when signing up with age 12

5. If you enter age 13, are there any additional verification processes (e.g. emailing a parent)?

If a user enters age 13, they are allowed to set up an account. Note, it was not straightforward to change the date after entering 12 in the previous step. The tester was required to reinstall the app to clear the original DoB from the screen. There are no additional verification procedures

- 6. Can you easily bypass these verification processes? (Do you get access anyway?)

 There are no additional verification procedures
- 7. If you enter age 16 on signup, is there any attempt at verification?

 Any age restrictions can be bypassed by giving false age
- 8. At any point is the minimum age made clear to the user? The minimum age is laid out in the terms of use and by refusing an account if aged under 13.

8. DISCORD

Testing Summary



Table 8: Test Summary for Discord

QUES	TION	ANSWER
1.	What is the minimum age stated in	13
	the terms of use?	
2.	Is this the same across all EU	Yes
	countries?	
3.	Does the service ask for your age on	No
	signup?	
4.	If so, what happens if you enter age	N/A
	12?	
5.	If you enter age 13, are there any	N/A
	additional verification processes (e.g.	
	emailing a parent)?	
6.	Can you easily bypass these	N/A
	verification processes? (Do you get	
	access anyway?)	
7.	If you enter age 16 on signup, is there	N/A
	any attempt at verification?	
8.	At any point is the minimum age	No
	made clear to the user?	

Detailed Notes and Screenshots

1. What is the minimum age stated in the terms of use?

Terms of use state a minimum age of 13 as shown in Figure 30.

INTRODUCTION AND ACCEPTING THE TERMS

Welcome to Discord! These Terms of Service ("Terms"), which include and hereby incorporate the Privacy Policy at https://discordapp.com/privacy ("Privacy Policy"), are a legal agreement between Discord Inc. and its related companies (the "Company," "us," "our," or "we") and you ("you" or "your"). By using or accessing the Discord application (the "App") or the website located at https://discordapp.com (the "Site"), which are collectively referred to as the "Service," you agree (i) that you are 13 years of age or older, (ii) if you are the age of majority in your jurisdiction or over, that you have read, understood, and accept to be bound by the Terms, and (iii) if you are between 13 and the age of majority in your jurisdiction, that your legal guardian has reviewed and agrees

Figure 30: Terms of Use of Discord

2. Is this the same across all EU countries?

Terms of use are global

3. Does the service ask for your age on signup?

DoB or age is not requested during the signup process. Figure 31 shows the only information that the user has to input in order to set up an account.

Register		
WHAT SHOULD EVERYONE CALL YOU?		
Username		
ACCOUNT INFORMATION		
Email		
Password		
I have read and agree to Discord's Terms of Service and Privacy Policy.		
Create an account		

4. If so, what happens if you enter age 12?

Not applicable as age is not requested during the signup process for Discord.

5. If you enter age 13, are there any additional verification processes (e.g. emailing a parent)?

Not applicable as age is not requested during the signup process for Discord.

- 6. Can you easily bypass these verification processes? (Do you get access anyway?)

 Not applicable as age is not requested during the signup process for Discord.
- 7. If you enter age 16 on signup, is there any attempt at verification?

 Not applicable as age is not requested during the signup process for Discord.
- 8. At any point is the minimum age made clear to the user?

 Although the minimum age of 13 is in the Discord Terms of Use, it is not made clear to the user at any time during the signup process.

9. MESSENGER



Testing Summary

Table 9: Test Summary for Messenger

QUES	TION	ANSWER
1.	What is the minimum age stated in	13
	the terms of use?	
2.	Is this the same across all EU countries?	Yes
3.	Does the service ask for your age on signup?	Yes
4.	If so, what happens if you enter age 12?	User is not allowed to set up an account
5.	If you enter age 13, are there any additional verification processes (e.g. emailing a parent)?	No
6.	Can you easily bypass these verification processes? (Do you get access anyway?)	Yes
7.	If you enter age 16 on signup, is there any attempt at verification?	No
8.	At any point is the minimum age made clear to the user?	Yes

Detailed Notes and Screenshots

1. What is the minimum age stated in the terms of use?

Messenger is a Facebook product and is covered by the Facebook Terms of Use. The minimum age limit for using the service is 13 as can be seen in Figure 32.

We try to make Facebook broadly available to everyone, but you cannot use Facebook if:

• You are under 13 years old.

Figure 32: Terms of Use for Facebook

2. Is this the same across all EU countries?

The minimum age for creating an account on the Facebook suite of products is the same for all EU countries. It is not clear whether the previously noted exception of Spain (as shown in Figure 33) and linked below applies also to Messenger. https://www.facebook.com/help/100532533374396?helpref=search&sr=1&query=age %20spain&search_session_id=646b94cdf1acb574687000ab5ac68310

In most jurisdictions, Facebook requires everyone to be at least 13 years old before they can create an account. We strive to create a global community with consistent standards for everyone, but we also strive to respect local laws. In observance of laws in South Korea and Spain, we require anyone living in these countries to be at least 14 years old before they can create an account.

Figure 33: Facebook Support webpage outlining minimum age for Facebook

3. Does the service ask for your age on signup?

User is asked for DoB as part of sign up process, as shown in Figure 34



Figure 34: Messenger Sign up process

4. If so, what happens if you enter age 12?

If the user inputs an age of 12, they are not allowed to sign up to the app as shown in Figure 35.

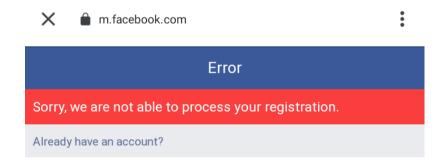


Figure 35: Message to user who states their age is 12 during sign up

5. If you enter age 13, are there any additional verification processes (e.g. emailing a parent)?

If the user inputs an age of 13, they are allowed to proceed. However, if the user had previously entered an age of 12, it was required to remove both Facebook and Messenger apps from the device, and then reinstall Messenger, in order to proceed with a new signup. There are no additional requirements for verification. Once signed up, as

a 13 year old, there is an option in the settings (shown in Figure 36) to get parental approval for changes in how data is treated. However the user would have to go looking for this and it is not a requirement. It appears that Messenger applies default settings for 13-15 year olds, which can be overridden at a later stage if required through a parental approval process.

Parent/guardian approvals

Review the ways that we use data to personalise your experience.



Review Data Settings

Then get approval from a parent/guardian.

Figure 36: Setting in Messenger for parental consent to changes

6. Can you easily bypass these verification processes? (Do you get access anyway?)

A user could simply lie about their age in the first place to get around any age restrictions.

7. If you enter age 16 on signup, is there any attempt at verification?

There are no additional requirements for verification.

8. At any point is the minimum age made clear to the user?

The minimum age is made clear when signing up and in the terms of use.

10. WHATSAPP

Testing Summary



Table 10: Test Summary for WhatsApp

QUES	TION	ANSWER
1.	What is the minimum age stated in	16
	the terms of use?	
2.	Is this the same across all EU	Yes
	countries?	
3.	Does the service ask for your age on	No
	signup?	
4.	If so, what happens if you enter age	N/A
	12?	
5.	If you enter age 13, are there any	N/A
	additional verification processes (e.g.	
	emailing a parent)?	
6.	Can you easily bypass these	N/A
	verification processes? (Do you get	
	access anyway?)	
7.	If you enter age 16 on signup, is there	N/A
	any attempt at verification?	
8.	At any point is the minimum age	Yes
	made clear to the user?	

Detailed Notes and Screenshots

1. What is the minimum age stated in the terms of use?

Terms of use state a minimum age of 16 as shown in Figure 37.

Age. If you live in a country in the European Region, you must be at least 16 years old to use our Services or such greater age required in your country to register for or use our Services. If you live in any other country except those in the European Region, you must be at least 13 years old to use our Services or such greater age required in your country to register for or use our Services. In addition to being of the minimum required age to use our Services under applicable law, if you are not old enough to have authority to agree to our Terms in your country, your parent or guardian must agree to our Terms on your behalf.

Figure 37: Terms of Use of WhatsApp

2. Is this the same across all EU countries?

Terms of use are across the EEA as shown in Figure 38.

If you live in a country in the European Economic Area (which includes the European Union), and any other included country or territory (collectively referred to as the European Region), WhatsApp Ireland Limited provides WhatsApp to you under this Terms of Service and Privacy Policy.

Figure 38: Localised options for Terms of Use on WhatsApp

3. Does the service ask for your age on signup?

DoB or age is not requested during the signup process.

4. If so, what happens if you enter age 12?

Not applicable as age is not requested during the signup process for WhatsApp.

5. If you enter age 13, are there any additional verification processes (e.g. emailing a parent)?

Not applicable as age is not requested during the signup process for WhatsApp.

- 6. Can you easily bypass these verification processes? (Do you get access anyway?)

 Not applicable as age is not requested during the signup process for WhatsApp.
- 7. If you enter age 16 on signup, is there any attempt at verification?

 Not applicable as age is not requested during the signup process for WhatsApp.
- 8. At any point is the minimum age made clear to the user? The minimum age of 16 is in the WhatsApp Terms of Use, and this age restriction is also shown on the sign up screen as per Figure 39.

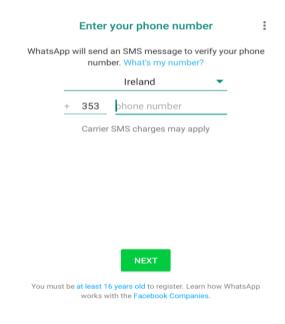


Figure 39: WhatsApp sign up screen

Summary of Test Results

A summary of results for all 10 apps is given overleaf in Table 11.

The results of this test are similar to those found in 2019. It is possible to bypass any of the age verification mechanisms by simply lying about your age. However, since the last test was conducted in 2019, there have been a number of new developments. These changes are highlighted in Table 11 and are briefly summarised below:

1. There are now some restrictions in place that might act as a deterrent (rather than a barrier) to underage users. For instance on certain apps, it is quite challenging after giving an initial age of 12, and being rejected, to then start the signup process again and pretend you are 13 after all. On TikTok - it is now significantly harder to bypass restrictions if you were initially honest about your age. Despite refreshing the cache and deleting the app, it was necessary to actually switch device in order to successfully sign up as a 13 year old once an initial age of 12 was entered. You can also report the issue to TikTok but must send in proof of age. This feature was put in place following TikTok being fined by the Federal Trade Commission in the United States in early 2019 for collecting data on underage users.

However, if the user enters an older age from the start, there are there are still no effective age verification mechanisms.

Messenger makes it somewhat difficult to sign up with an older age after attempting to sign up as a 12 year old. It was necessary to clear the cache and remove both Facebook and Messenger apps in order to be able to restart sign up process.

A similar situation exists with HouseParty but reinstalling the app was enough to bypass this mechanism.

 $^{{\}scriptstyle 1\ \ \ } https://www.independent.co.uk/life-style/gadgets-and-tech/news/tiktok-account-locked-deleted-recover-app-a8800986.html}$

Mechanisms such as those deployed by TikTok may be seen as a very positive step forward making it more difficult from the outset for underage users to sign for services below the minimum age.

- 2. **Messenger is now asking for an age during signup.** It does not explicitly request parental consent for 13-15 year olds during signup but there is an option in the settings once signed up to change the privacy settings and get parental consent. This suggests that there are extra data protections in place for 13 to 15 year olds by default.
- 3. On Skype, the minimum age has been removed from the Terms of Use and a 12 year old can now sign up.

A 12 year old can now sign up with parental consent. This is in contrast to all of the other apps tested, with the exception of Discord which doesn't appear to have any obvious age barriers.

4. There are some changes to some Terms of Use being EU-wide and there are minor changes in how these were reported last year.

TikTok, Messenger and Instagram Terms of Use are now EU wide. This was the case also last year for Messenger and Instagram (see points 2 in testing for each app). It is unclear, however, whether the age 14 for Facebook services in Spain applies to the entire suite of products.

In terms of recommendations of areas for further research, it would be useful for future research to examine the specific differences in privacy settings and data collected where a user has signed up and declared themselves to be aged 13-15 (with or without parental consent obtained). This was not tested as part of this study but there do seem to be variances between the settings for a 13 year old, and those for a 16 year old (e.g. Messenger) and this is noted also in some Terms of Use (e.g. Viber).

Table 11: Summary of Test Results for all 10 Social Media Apps

QUESTION	Snapchat	Instagram	Tiktok	Viber	Skype	Facebook	HouseParty	Discord	Messenger	WhatsApp
What is the minimum age stated in the terms of use?	13	13	13	13	None	13	13	13	13	16
Is this the same across all EU countries?	Yes	Yes	Yes	Yes		No. Spain has minimum age 14		Yes	Yes	Yes
Do they ask for your age on signup?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No
If so, what happens if you enter age 12?	User is not allowed to set up an account	User is not allowed to set up an account	User is not allowed to set up an account	Not possible to select	You are allowed to continue but you are required to get parental consent via email	allowed to set	User is not allowed to set up an account		User is not allowed to set up an account	N/A
If you enter age 13, are there any additional verification processes (e.g. emailing a parent)?	No	Yes.	No	No	Yes.	No	No	N/A	No	N/A
Can you easily bypass these verification processes? (Do you get access anyway?)	Yes	Yes	No	Yes	Yes	Yes	Yes	N/A	Yes	N/A
If you enter age 16 on signup, is there any attempt at verification?	No	No	No	No	No	No	No	N/A	No	N/A
At any point is the minimum age made clear to the user?	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes

Shaded = change since 2019