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How Snapchat's notifications manipulate users

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1. ABSTRACT

We conducted research into the notifications sent by Snapchat, a Very Large Online Platform (VLOP), to determine whether they involve manipulative design and whether Snapchat is in violation of the Digital Services Act (DSA).

To this end, we conducted a case study in which we monitored Snapchat notifications over a period of six weeks. We applied six different conditions, based on the frequency at which the app was opened and whether or not accounts were followed. We received the most notifications in the condition where we did not open Snapchat and did not follow any other accounts. Some notifications were misleading because they contained false information, appeared to be personal messages from other users, or were incorrectly labelled as time-sensitive. It also became apparent that users cannot influence in-app badges, even though that is a type of notification.

We then conducted a qualitative study consisting of N=13 semi-structured interviews with social media users, including Snapchat users. They often find notifications disruptive, particularly if the notifications are about recommended content or content posted by accounts they follow. Users therefore sometimes turn off notifications altogether. Some users also do so for badges, which create a sense of unfinished tasks. The notifications displayed did not always match the user's expectations, which suggests deception. The user sometimes believed the notification was a personal message, when it was in fact content from recommended or followed accounts. Users also interpreted some friend suggestions as friend requests. Finally, notifications did not always lead to what they referred to.

The study results point to a possible violation of the Digital Services Act, Article 25, on manipulative design on VLOPs. The results also make it clear that regulation of attention-capturing notifications is necessary. This will give users maximum control and autonomy on online platforms. We recommend that notifications be disabled by default and that users be able to indicate which ones they want to receive per category. These categories should in any event include notifications that can be generated by the platform itself at any time (such as suggestions) and in-app badges.

2. INTRODUCTION

Social media platforms are used on a massive scale and are playing an increasingly important role in our daily communication. It is important that these platforms comply with laws to protect the safety, privacy and freedom of communication of citizens. The impact of new technological developments on these platforms must also be investigated. That way we can guarantee a safe, fair and free online environment. **That is why Bits of Freedom is investigating these online platforms.**

In this report, we present our study into **the notifications sent by (VLOP) Snapchat**. The aim was to establish whether Snapchat uses manipulative design, whether its notifications violate the Digital Services Act (DSA), what impact this has on users, and what policymaking is needed in this regard.

To this end, we first conducted a case study in which we monitored Snapchat notifications over a period of six weeks. Secondly, we conducted qualitative research in which we interviewed social media users (including Snapchat users) about their experiences with social media and notifications. We also tested specific Snapchat notifications with the users.

2.1 THE CHANGING FUNCTION AND IMPACT OF NOTIFICATIONS

To understand why notifications may play a role in manipulating users, it is important first to consider the function of notifications.

Notifications originated during the rise of email software¹. A way was sought to notify users of new messages (emails). Since then, an increasing number of applications have started using notifications, to the point where it is almost unthinkable for an application not to send notifications.

On social media platforms, however, the purpose of notifications has increasingly **shifted from informing users to capturing their attention**. In the past, users mainly received notifications if they had received a message from other users or if they had to complete an important action. Nowadays, users often receive notifications with suggestions or recommended content. Unlike in the case of notifications about messages from other users, online platforms can **themselves generate an endless number** of notifications about suggestions and thereby capture users' attention. Online platforms do this because **they benefit** when users return to their platform frequently and spend more time there. This maximizes the revenue that platforms earn from advertising.

This has led us into an era in which applications **compete for users' attention**. As a result, notifications have come to play a greater role in our lives. This is

¹Fitz et al. (2019)

reinforced by the fact that most people nowadays always carry a smartphone with them².

It is difficult to say how many notifications smartphone users receive on average per day; different studies report different averages. The averages may depend on the country where the study was conducted, on the year and on the method. A recent study among American young people between the ages of 11 and 17 shows that they receive an average of 237 notifications per day³.

Because notifications can usually arrive at any time, that also happens at unwelcome times, for instance when you were offline doing something else⁴. People are **disturbed or distracted** by this and take longer to complete the tasks they were working on⁵. How disruptive users find notifications appears to depend on, among other things, the sender, the manner in which the notifications are presented, and the type of task associated with the notification. A notification that does not come from a person is more disruptive than one from a close family member, for instance⁶.

Ignoring notifications is difficult because they often arrive as a sound, a vibration, or a screen flash. Since it is not yet clear what the notification relates to, **this arouses curiosity**. It is very difficult not to look. Users thus unintentionally lose some of their time viewing notifications and deciding whether to open the platform afterwards.

Sometimes it turns out to be a fun message, but sometimes it does not. That way, notifications play on **our sensitivity to variable rewards**⁷. Precisely in the case of variable rewards, users repeat the behavior (viewing and clicking) most often, in the hope that this time a pleasant reward awaits them; the same mechanism can be found in slot machines. When users look and click, they are directed to the app, where **they may be further distracted** by other content. Notifications thus function as **a trigger** for people who have difficulty curbing their (possibly excessive) smartphone use.

It is also an option to simply turn off notifications. Although this puts users back in control of their time, Fitz et al. (2019) discovered that this can also lead to **increased feelings of FOMO** (fear of missing out) and **anxiety**. This was discovered by comparing a group that received notifications as usual with a group that received notifications at scheduled times (three times a day). This can possibly be explained by the fact that we are accustomed to being informed of news immediately. We know that other persons who do have notifications turned on may be informed sooner than we are. It has also become the norm in some

²Sahami Shirazi et al. (2014)

³Radesky et al. (2023)

⁴Mehrota et al. (2016)

⁵Horvitz & Cutrell (2001)

⁶Mehrota et al. (2016)

⁷Alter (2017) in Fitz et al. (2019)

social contacts **always to be available** and to respond to persons who try to reach you (social pressure)⁸.

The study⁹ also showed that participants who received notifications at scheduled times felt more focused, productive, in a better mood and more in control of their phone than those who received notifications as usual. This therefore seems to be a good way to **regain** some **control** over our attention and smartphone use. More regulation of notifications and other attention-capturing mechanisms is needed to achieve this goal.

2.2 WHY CHOOSE 'NOTIFICATIONS ON SNAPCHAT' AS A RESEARCH TOPIC?

In earlier research¹⁰, we demonstrated that large online platforms still make extensive use of manipulative design, despite this being expressly mentioned and prohibited in the Digital Services Act (DSA) and the Unfair Commercial Practices Directive (UCPD). One of the VLOPs we analyzed for this purpose was **Snapchat**.

What stood out was the number and type of **notifications** that Snapchat sends. We identified **two manipulative types**:

1. **Recapture notifications**: notifications generated by the platform to encourage the user to return to the platform. These notifications are not based on an interaction (such as a message or like from another user). Examples include notifications about new lenses (visual filters that allow you to edit photos) and recommended videos.
2. **Fake friend notifications**: notifications that make it appear as if another user has sent you a message, but that is not the case (and is therefore misleading), such as a notification with a profile photo, username and the text 'look!', when a person you follow has new content available.

Both are forms of attention-capturing damaging patterns¹¹. These are recurring patterns that attract and/or hold a person's attention. This can lead to users staying on a platform longer than they intended and regretting it later. This restricts users' **autonomy and freedom of choice**.

Snapchat also uses **other** attention-capturing damaging patterns¹², such as the Snapstreaks. This requires users to return to the platform every day to send Snaps to other persons in order to maintain the streak. The infinite scroll, with hyper-personalized content on the Spotlight page, is also known as a tactic to retain the user's attention for as long as possible. The combination of these

⁸Pielot, Chruch & de Oliveira (2014) in Fitz et al. (2019)

⁹Fitz et al. (2019)

¹⁰Exploratory Study of Manipulative Design https://www.bitsoffreedom.nl/wp-content/uploads/2025/06/20250616-report-exploratory_study_manipulative_design.pdf

¹¹Monge Rofarello et al. (2023)

¹²Exploratory Study of Manipulative Design https://www.bitsoffreedom.nl/wp-content/uploads/2025/06/20250616-report-exploratory_study_manipulative_design.pdf

techniques creates **the ideal condition for excessive smartphone use**. This is one of the reasons why we have focused our current research on Snapchat. This does not mean that these techniques are absent from other online platforms.

Another factor is that the majority of Snapchat users are young people (aged 12 to 27)¹³. They may be particularly vulnerable to manipulative, attention-capturing techniques, causing them to lose control over their smartphone use. A report by Common Sense¹⁴ states that young people are aware of these techniques and are conscious of their smartphone use, but that they still **find it very difficult** to maintain control.

Snapchat and Discord were also found to be the two apps from which young people received the most notifications. This can be partly explained by the fact that chatting (exchanging messages) is the main function of these apps, and users therefore receive many notifications when they exchange many messages with friends.

Snapchat plays a **major role** in smartphone use among young people. We see many attention-capturing damaging patterns with Snapchat. That is why it is important to further investigate the impact of this app and its techniques.

¹³Snapchat user statistics in the Netherlands 2024 <https://fingerspitz.nl/blog/snapchat-gebruikersstatistieken-in-nederland-2024/>

¹⁴Radesky et al. (2023)

3. RESEARCH APPROACH

3.1 WHAT APPROACH DID WE TAKE AND WHY?

Our focus was on identifying potentially **manipulative notifications** on Snapchat, for which we conducted two sub-studies:

1. Case study:

We started with a case study, in which we monitored all notifications sent by Snapchat over a certain period of time. This gave us a comprehensive picture of the frequency, layout and content of different types of notifications. This was necessary in order to make statements about the extent of attention-capturing notifications and to identify potentially misleading notifications. Some of these notifications formed the input for the second sub-study, in which we tested the notifications with social media users. We also looked for indications that the extent of app usage influenced the number of notifications. This told us something about the purpose of the notification: is it intended to keep the user informed, or to draw the user back to the platform when they are not using it much?

2. Qualitative study:

We then sought to gain a deeper understanding through qualitative research. This provided insight into the experiences, needs, behaviors and expectations of social media users (including Snapchat users) regarding notifications in general, and specific Snapchat notifications. This is important because it allows us to make statements about the actual meaning and impact that notifications have for social media users, rather than merely relying on our assumptions. We tested a number of screenshots of notifications to determine specifically to what extent a participant was inclined to click, whether they found the notification interesting, and whether the notification led to what they expected. This gave us an idea of the extent to which specific notifications are misleading.

The combination of these two types of study provides a picture of all the different notifications that come in, which is enriched by the experiences and assessments of users.

Objectives of the research

- Substantiation of possible enforcement action based on the DSA concerning deception on online platforms.
- Validation of our DFA position, in which we argue that constantly drawing users' attention undermines their autonomy. That is why we advocate, among other things, notifications that are disabled by default, allowing users to choose which ones they wish to enable (opt-in instead of opt-out).

- Raising awareness and offering concrete options for action to users who find certain notifications undesirable (such as turning off and setting notifications).

3.2 DETAILED APPROACH TO CASE STUDY

We created six conditions in which the first variable was the frequency of opening (3 levels) and the second variable was whether or not to follow other accounts (2 levels).

Conditions	Not following	Following
Not opening	Condition 1	Condition 4
Opening daily	Condition 2	Condition 5
Opening frequently	Condition 3	Condition 6

This gave us clues as to whether the frequency of opening and whether or not to follow accounts might influence the number and type of notifications that a user receives.

For all these conditions, we used one phone with the same Snapchat account. We carried out the conditions in order (starting with condition 1). In each condition, we monitored the push notifications, app badges and in-app badges for five consecutive days.

- **Condition 1:** We created a Snapchat account and then did not open the app again.
- **Condition 2:** We opened the app daily and scrolled through ‘Spotlight’ and ‘Stories’ for 5 minutes. We clicked on all the red badges in the app so that they disappeared. This allowed us to see if they reappeared the next time. We also occasionally gave a ‘like’ to imitate ‘normal’ use of the app.
- **Condition 3:** We opened the app four times per day and scrolled through ‘Spotlight’ and ‘Stories’ for 5 minutes. We clicked on all the red badges in the app so that they disappeared. That way, we could see if they reappeared the next time. We also occasionally gave a ‘like’ to imitate ‘normal’ use of the app.
- **Condition 4:** We followed ten public accounts and then did not open the app again.
- **Condition 5:** We opened the app (which now follows ten accounts) daily and scrolled through ‘Spotlight’ and ‘Stories’ for 5 minutes. We clicked on all the red badges in the app so that they disappeared. That way, we could see if they reappeared the next time. We also occasionally gave a ‘like’ to imitate ‘normal’ use of the app.
- **Condition 6:** We opened the app (which now follows ten accounts) four times per day and scrolled through ‘Spotlight’ and ‘Stories’ for 5 minutes. We clicked on all the red badges in the app so that they disappeared. That way, we could

see if they reappeared the next time. We also occasionally gave a 'like' to imitate 'normal' use of the app.

Important: The way we use Snapchat under these conditions is not representative of the way the average user uses Snapchat. The type and number of notifications that a user receives will depend on which accounts they follow and how they have set their notifications, both on their phone, specifically for Snapchat, and in the settings in the Snapchat app. The results will therefore mainly show what types of notifications there are, which ones are sent when starting a new account, whether any deception occurs, and which factors appear to be related to the number of notifications received.

As this is a case study (N=1), we cannot conclusively say that the same ratio and number of notifications will be replicated if we repeat the study with another account. It is possible that Snapchat experiments with notifications per user to find out what works best to get that user to click.

3.3 DETAILED APPROACH TO QUALITATIVE STUDY

We conducted **N=13 semi-structured interviews lasting 50 minutes**. This means that we did not create a questionnaire that was administered literally and in sequence, but instead used an interview guide. This ensured that all the main questions and relevant topics were covered and allowed us to follow up on the answers given by participants. This allowed us to gain even more in-depth insight into the how and why. See the appendices¹⁵ for the interview guide.

Question to be answered

In the interviews, we delved into the experiences, behaviors, needs and expectations of participants about receiving notifications. This helped us to paint a picture of the impact of social media and notifications on the daily lives of participants, and whether they are being misled in this regard. Our main questions:

- How/for what purpose does the participant use social media platforms in general? And Snapchat?
- What do participants think about their own smartphone use? Is that use well-considered? How so?
- What are their experiences with receiving notifications and red badges on social media? What advantages and disadvantages do participants identify?
- How do participants use/behave with regard to notifications? When do they turn them off? How have they set them up?

We then showed screenshots of Snapchat push notifications about friend suggestions, content posted by friends/followed persons, and recommended

¹⁵See Appendix 4. Qualitative study: Interview guide

content. The content always consisted of Spotlight videos or Stories. This was because we identified misleading techniques in these notifications in the case study and wanted to test this with participants. We also showed screenshots of the in-app badges in Snapchat. Accompanying questions:

- What does the participant expect from the notification? What does the notification mean?
- How interesting is it? Does the participant want to click on it?
- To what extent did something open other than what the participant expected?
- Does the participant have any general reflections on the notifications that they saw in the interview?
- Does the participant believe there should be rules regarding notifications? If so, which?

Who participated?

We invited Snapchat users (N=9) and social media users without Snapchat (N=4). This allowed us to include assessments and experiences of people who encountered Snapchat for the first time and users who were already familiar with Snapchat. For this purpose, we used an external respondent agency that has a research panel. This is a large international panel to which people sign up if they wish to participate in market or other research. Based on our briefing, the selection agency selected participants for the study¹⁶. The age distribution was as follows:

- 15-19 years: N=5 users
- 20-27 years: N=3 users, N=1 non-user
- 28-43 years: N=1 user, N=1 non-user
- 44-60 years: N=2 non-users

The age distribution is based on the [2024 user statistics in the Netherlands](https://fingerspitz.nl/blog/snapchat-gebruikersstatistieken-in-nederland-2024/)¹⁷

¹⁶ See Appendix 5. Qualitative study: Selection criteria

¹⁷ Snapchat user statistics in the Netherlands 2024 <https://fingerspitz.nl/blog/snapchat-gebruikersstatistieken-in-nederland-2024/>

4. KEY INSIGHTS

4.1 WHAT DID WE LEARN FROM THE CASE STUDY?

- We received a total of 109 notifications. Most notifications were about **Spotlight videos** (43) and **Stories** (27). The rest were suggestions for creative effects, friend suggestions and message reminders. Within these categories, the notifications differed in terms of layout, sender and description. In other words, a notification about a Spotlight video can look different in various ways.
- Of the total number of notifications, we identified **39 as misleading** due to their design. All of these were notifications about Spotlight videos (23) and Stories (16). They came from both recommended accounts and accounts we followed.
- The misleading notifications were misleading because:
 - they resembled **another user sending you a message**. In fact, they were (recommended) posted content from that user, such as a Story or a Spotlight video. We received these notifications from both users we follow and users we do not follow. See Figure 1;
 - they contained **false information**. On several occasions, we received the notification 'Check out this Spotlight post from a creator you follow' even though we were not following anyone. See figure 2;
 - they are sometimes time-sensitive and sometimes not, which makes them seem **random**. **Even for permanent content such as Spotlight videos**, time-sensitive notifications are sometimes sent. The notifications thus create unnecessary time pressure to view the content. See figure 3.

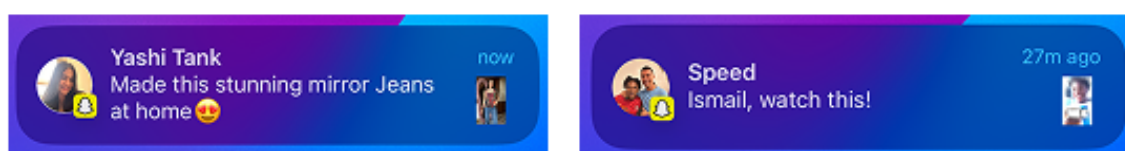


Figure 1: Fake friend notifications

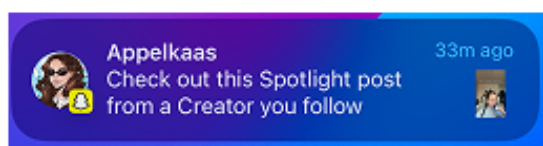


Figure 2: False information

- We received **more notifications in the condition in which we used the app less** (did not open it). We also received **more notifications in the conditions in**

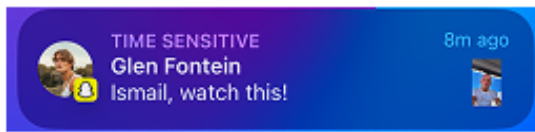


Figure 3: Time-sensitive

which we were not following anyone than when we were following accounts. This seems contradictory: you would expect to receive more notifications the more users you follow. This is an indication that the notifications are used as recapture notifications, **intended to draw the user back to the platform**, especially when their usage is low.

- In the conditions in which we did not follow anyone, we received notifications about **friend suggestions** more often. This may be an encouragement from Snapchat to add more contacts and thus use the app more.
- The red dots on the app icon (app badges) did not always increase proportionally to the number of push notifications we received. It would appear as if one is occasionally skipped. In other words, if the user receives four new push notifications, that does not necessarily mean that the number in the badge increases by four. The number furthermore resets after a while if the user does not open the app. This makes the mechanism **nontransparent**, as it is impossible to deduce how the badge number is calculated.
- The red dots in the app (in-app badges; see Figure 4) appeared **every time we opened the app**. They only disappeared when you clicked on them. There is no way for users to set whether they wish to receive in-app badges and, if so, which:
 - The badge on the Stories icon appeared only when accounts we followed posted something new.
 - The badge on the Spotlight icon always appeared. It is not entirely clear what this indicates, except that there are new videos. However, this is always the case. This may lure users to this infinite scroll page.
 - The badge on the comments icon for Spotlight videos always appeared. Again, there will always be comments that the user has not yet read.
 - The badge on the friend suggestion icon appeared regularly, including a number. This was not proportional to the number of push notifications that the user received about friend suggestions.

4.2 WHAT DID WE LEARN FROM THE INTERVIEWS?

- Snapchat is used primarily as a **messaging service**. Young people are making increasingly less use of WhatsApp for this purpose. Whereas messages on

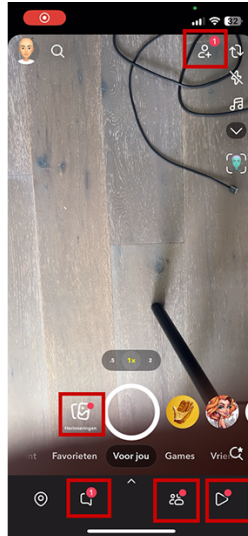


Figure 4: In-app badges

WhatsApp are stored, those on Snapchat are temporary. Participants consider other Snapchat applications, such as Stories and Spotlight, less important. Spotlight is similar to TikTok, but they say the algorithm works ‘better’ on TikTok. TikTok is therefore often used alongside Snapchat. Participants over the age of 20 also indicated that they use Instagram a lot. Facebook is used much less by all age groups.

- Checking and scrolling on social media has become a habit. Users are particularly critical about the time they spend on so-called ‘**scroll apps**’ (TikTok, Instagram reels), because it feels like they are wasting their time. Although young people use Snapchat even more than scroll apps, they find it more useful because Snapchat primarily functions as a messaging service.

“Curiosity – opening the app is almost a habit, muscle memory.”

- Many participants are **consciously trying** to reduce their screen time. Young people (15-19) slightly less so. Participants use various tactics to achieve this:
 - special apps that allow you to set time limits;
 - putting their phone away or in a different place;
 - deleting social media apps;
 - turning off notifications.
- Notifications are useful for staying informed and responding quickly, but they often trigger more **(unrelated) app use**.

“A message can create a kind of chain reaction that keeps you on your phone longer.”

- Notifications are turned off at **specific times**, such as during work or at bedtime. Participants also sometimes mute **specific conversation partners** if they share a lot of content with them. Sometimes notifications from **specific platforms**, such as social media, are turned off. This is because people often receive uninteresting notifications from them.

“Because you’re sent notifications for the smallest things, like when someone has posted something, I think, ‘Yeah, I’m not interested. I’ll see it when I open the app.’”

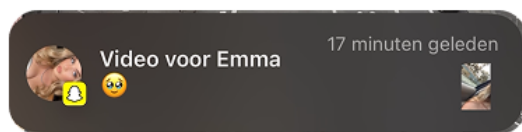
- Participants find notifications about personal messages the most interesting. They find notifications about content posted by friends or accounts that a participant follows less interesting. Participants find notifications about **recommended content uninteresting and annoying**. It is remarkable that these are automatically enabled on most social media platforms. It would therefore appear that these notifications are not there to meet user needs, but rather to **influence users to open the app again**. But users do not specifically turn off these notifications; they find notification settings within the app too complicated and too much hassle.

“This always makes me a bit recalcitrant: that apps decide what I like. Actually, I probably don’t like it at all”

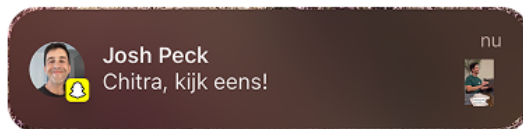
- App and in-app badges trigger clicks. Participants want a tidy screen and want to get rid of the feeling that they still have something to do. Some therefore have app badges turned off. However, users have **no control over** in-app badges: they cannot set them or turn them off. They do find this type of notification less annoying than notifications outside the app: less invasive and the user is ‘already in the app anyway’.

“It’s to attract attention, which is sneaky and clever, of course, because you’re going to click, even though it’s not always interesting.”

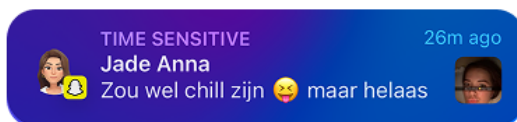
- Users do not have a strong opinion about rules for notifications. But they are concerned about the youngest users and would like to see rules for social media in this area.
- Participants confirm our assumption that some Snapchat notifications are misleading:
- Some notifications about Spotlight videos and Stories are **interpreted as personal messages** (addressed to the recipient). This is due to the descriptions on the one hand and the sender on the other. Users find notifications about Spotlight videos and Stories unnecessary and uninteresting. See Figure 5;



“Ik denk dat dit iemand is die ik ken. ik denk niet dat onbekenden jou een Snap kunnen sturen.”
 “Ik heb het gevoel dat iemand mij een filmpje heeft gestuurd.”
 “Persoon A stuurt een foto naar mij, en heeft deze emoji als tekst toegevoegd.”



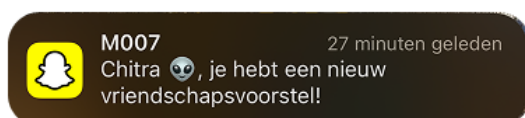
“Ik dacht dat het een persoonlijk iets was, maar het was toch weer zo’n reel, misleidend”



“Iemand die ik ken, die heeft iets gezien en dat wil ze delen met mij.”

Figure 5: Interpreted as personal messages

- Friend suggestions are **interpreted as friend requests**. See Figure 6.



“Dat vind ik wel misleidend: ik dacht dat diegene me had toegevoegd”

Figure 6: Friend suggestion

- Notifications about Stories do not always lead to the specific Snap in the Story that is described, but to the latest Snaps in that Story, which means that **content** may appear that is **completely different** from what the user expects.
- Users may choose to turn off notifications about recommended content, but they will still see in-app badges appear on Spotlight, which displays public videos from recommended creators. Users find this badge uninteresting because it seems to appear randomly. It is perhaps no coincidence that this badge is displayed on the button that leads to the page with an endless scroll of videos: a mechanism known for retaining users’ attention. See Figure 7.

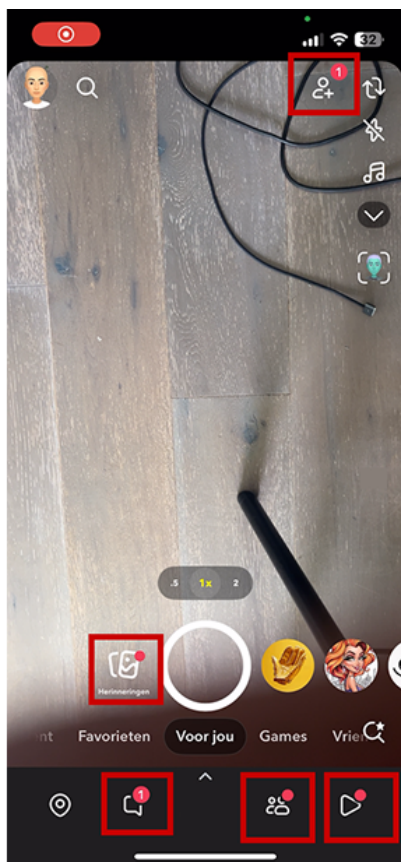


Figure 7: In-app badges

“Volgens mij komt er ook een rood bolletje als Snapchat bepaalt dat je misschien bevriend kan worden met iemand. Want dan denk je: hee ik heb een vriendschapsverzoek. Maar dat hoeft niet zo te zijn.”

“Gek dat er constant een rood bolletje staat op de Spotlight. Het zijn oneindig veel filmpjes dus er is altijd wel iets nieuws.”

“Volgens mij komt die bij de Spotlight gewoon willekeurig.”

“Bij Snapchat komt er een rood stipje bij de Spotlight als iemand een video heeft geplaatst. Dan zie je weer hoe ze je in de app proberen te krijgen. Het is gewoon een soort TikTok. Ik negeer het bijna altijd want het zijn altijd zinloze dingen, maar berichten kijk ik wel.”

5. CONCLUSIONS & RECOMMENDATIONS

5.1 CONCLUSION REGARDING ENFORCEMENT

When a user receives a notification, they decide whether or not to open it. The user cannot make a free and informed decision if that notification:

1. contains false information;
2. appears to come from another user;
3. does not lead to what the notification refers to;
4. is labelled as time-sensitive, while the notification refers to permanent content.

This is supported by the expectations and experiences expressed by social media users (including Snapchat users) themselves when they are shown screenshots of these notifications on Snapchat.

These practices may point towards a violation of the DSA (Article 25¹⁸), which prohibits misleading design on VLOPs.

5.2 RECOMMENDATIONS FOR FUTURE POLICY ON FAIR ONLINE PLATFORMS

Participants' experiences with social media provide insight into how certain design choices do not meet their needs and sometimes even have a negative impact. Participants spend more time on social media apps than they actually want to, for instance. All of them indicate that they would prefer to reduce their smartphone use. It is not without reason that users sometimes delete social media apps or turn off notifications.

User experiences and behavior are an essential source of information for developing new policy on online platforms. The upcoming **European Digital Fairness Act** is the perfect opportunity to do so. This law aims to safeguard a free and fair online environment. Among other things, the law addresses (possibly addictive) design techniques that deprive users of their freedom of choice and autonomy; design techniques that cause users to spend more time on an online platform than they would like and make choices they would not normally make.

The study shows that notifications are often perceived as disruptive and distracting. Users particularly dislike notifications if they do not contain information that is relevant to them, do not come from other users, or concern recommended content. However, specifically turning off these types of notifications is considered too much hassle; users prefer to turn off all

¹⁸ 'Providers of online platforms shall not design, organise or operate their online interfaces in a way that deceives or manipulates the recipients of their service or in a way that otherwise materially distorts or impairs the ability of the recipients of their service to make free and informed decisions.'

notifications from an app in one go. But this also makes users afraid of missing important things.

Notifications tempt users to open the app, after which they spend more time on the app than they intended because they are distracted by other content in the app. Badges¹⁹ also tempt users to click, because users do not know exactly what is behind them and because they create the feeling of an unfinished task. Although users can turn off app badges, they have no control over in-app badges. In-app badges also often appear when there is recommended content, even if the user has turned off notifications about recommended content. This still draws users' attention to things they are not actually interested in.

The findings from this study support our recommendations for the DFA, in which we argue that **attention-capturing practices** on online platforms **should be regulated** and that users should have **full control over notifications**:

- Notifications should be disabled by default, allowing users to consciously choose what notifications they wish to receive.
- Users should be able to indicate for each notification category whether or not they wish to receive it (e.g., yes for personal messages, no for friend suggestions).
- A distinction should be made between notifications generated by the platform itself and notifications originating from interactions with other users. This is because, in theory, the platform can generate an infinite number of notifications itself.
- 'In-app badges' should be included (in addition to push notifications) as a form of notification, so that users can control them, since they also attract attention and trigger users to click on them.

¹⁹Often red dots on an app icon (app badge) or on an element in the app (in-app badge) that indicate that something new is available; this is therefore also a form of notification.

6. CASE STUDY FINDINGS IN DETAIL

This chapter provides a more detailed analysis and explanation of the main insights (Chapter 4) from the case study. Appendix 2 provides an overview of all the types of notification we received during monitoring. It also shows the quantity of the notifications in the various conditions. Within each type, there are variations in layout, in terms of title/sender, description and image. The specific notifications that we consider misleading are colored pink and accompanied by an explanation. See also Appendix 3 for the entire logbook covering a period of six weeks.

More pushnotifications in the conditions in which we did not follow anyone and did not open the app. Most of them related to Spotlight videos.

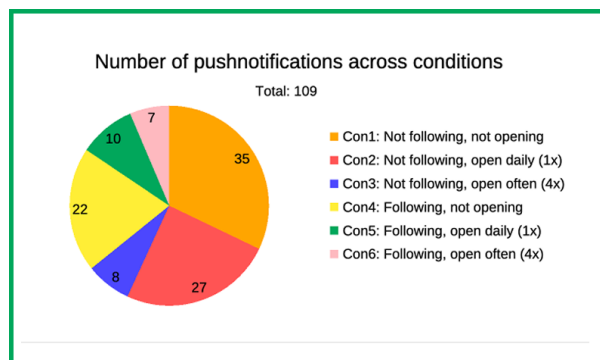
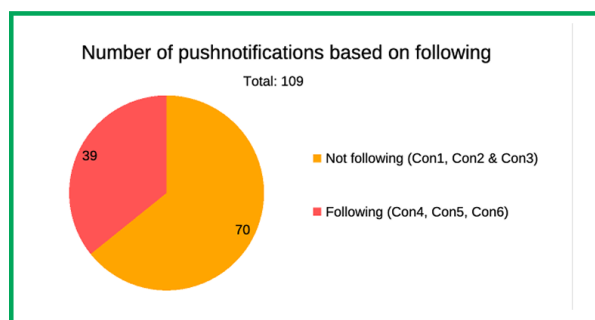


Figure 8: Number of push notifications per condition

A total of 109 push notifications were sent. In the first condition, in which we did not follow anyone and did not open the app, most push notifications were sent (35; 32%). In the sixth condition, in which we followed public accounts and opened the app frequently, the fewest push notifications were sent (7; 6%). See Figure 8.



Graph 2

Figure 9: Number of pushnotifications per condition grouped

In the three conditions in which we did not follow anyone (Con1, Con2 & Con3), more notifications were sent (70; 64%) than in the conditions where we followed ten public accounts (Con4, Con5 & Con6) (39; 36%). See Figure 9. Notifications

about Friend Suggestions also seemed to be sent most often when we were not yet following any accounts. This may be an encouragement from Snapchat to add other users and use the app more.

In the conditions in which we opened the app four times per day (Con3 & Con6), there were significantly fewer push notifications (15; 14%) than in the conditions in which we did not open the app (Con1 & Con4) (57; 52%) or opened it only once per day (Con 2 & Con5) (37; 34%).

These results seem **contradictory**: if you do not follow any accounts on a platform, you do not really expect to receive any notifications. And if you interact with a platform very little, you also expect there to be little to keep you informed about.

The fact that, in this case, making less use of the app and following fewer accounts are associated with more notifications suggests that Snapchat's notifications are primarily intended **to draw users back to the platform** (known as 'recapture notifications') rather than to keep users informed.

One caveat: the conditions in which accounts were followed occurred after the conditions in which no one was followed. The passage of time could also influence the number of notifications.

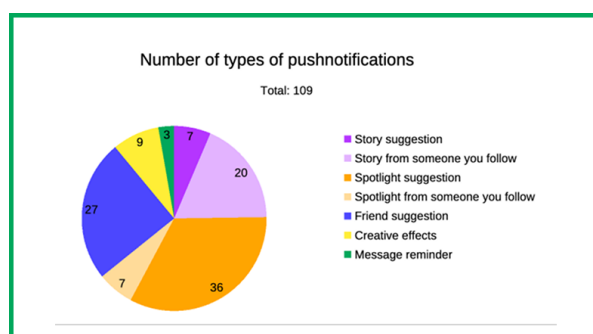


Figure 10: Number of push notifications per type

Notifications about Spotlight videos were the most common (43; 39%). This was often recommended content ('Spotlight suggestion'). See Figure 10.

Misleading notifications found only in Spotlight and Stories

Of all the notifications, we categorized 39 (36%) as misleading²⁰. There appears to be no correlation between the different conditions and the number of misleading notifications. See Figure 11.

The misleading notifications concerned only Spotlight videos or Stories, both from recommended accounts and from accounts we followed. Of the total of 43 notifications about Spotlight videos, we categorized 23 as misleading. Of the total of 27 notifications about Stories, we categorized 16 as misleading. See Figure 12.

²⁰See Appendix 2. Case study: Table Types of notifications received

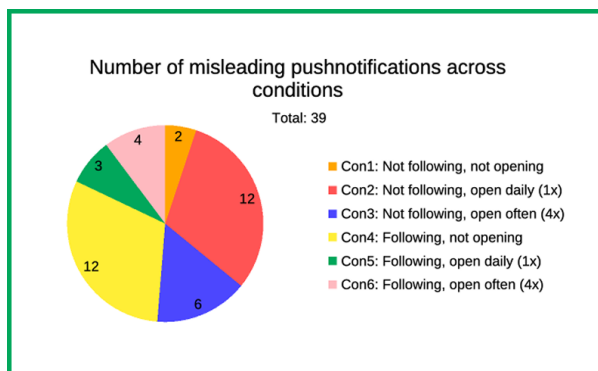


Figure 11: Number of misleading push notifications per condition

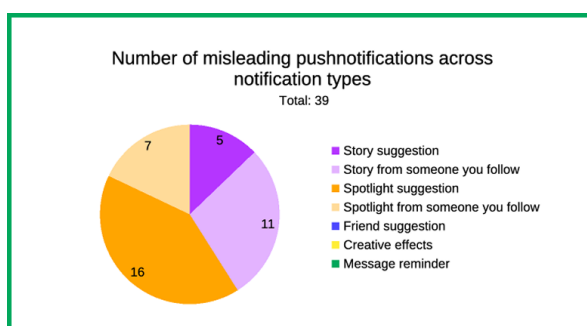


Figure 12: Number of misleading pushnotifications per type

What makes these notifications misleading

In the following paragraphs, we summarize the misleading notifications that we encountered.

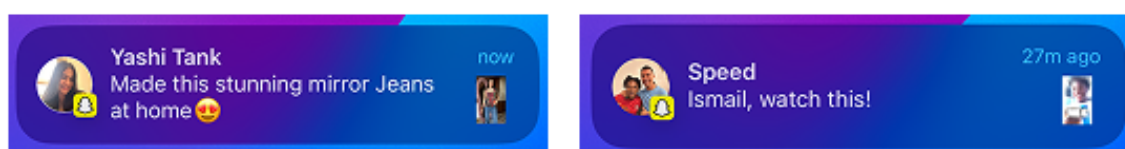


Figure 13: Fake friend notifications

In the Stories and Spotlight videos, we sometimes came across **fake friend notifications**: notifications that resemble a personal message from a user (see Figure 13). These show the user name, with a description typed by the user, or the text 'Watch this!'. We received these both from accounts we did not follow and from accounts we did follow.

Notifications that **do clearly** indicate that they are a Story or Spotlight are worded differently, namely:

- Story: '[username] added 3 Snaps to their Story'
- Spotlight: 'check out this Spotlight post...' or 'we think you'll like this Spotlight video'

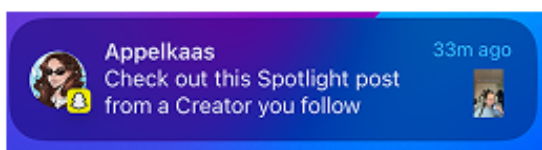


Figure 14: False information

In the conditions in which we did not follow any accounts, we received multiple notifications about different accounts: 'Check out this Spotlight post from a creator you follow' (see Figure 14). This was **false information**, because we did not follow these accounts. We had only previously liked a video from them.

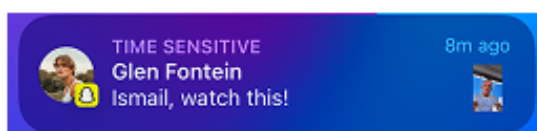
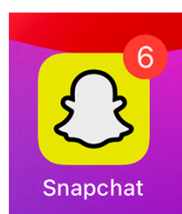


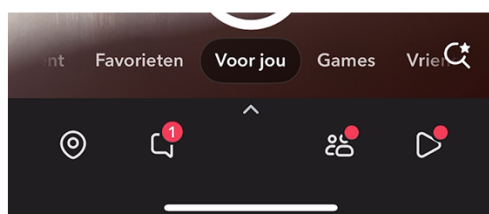
Figure 15: Time-sensitive

The final form of deception concerned **time-sensitive** notifications (see Figure 15). Sometimes notifications about Stories and Spotlight videos are sent as time-sensitive, and sometimes they are not. In the case of Spotlight videos, this is misleading because, unlike Stories, this is permanent content. On Snapchat, time-sensitive notifications are enabled by default.

Badges not consistently updated with the number of push notifications



App-badge



In-app badges

Figure 16: App badges

The app badge is not updated proportionally to the number of push notifications the user receives. Sometimes push notifications are received, but the number in the app badge does not increase. And sometimes it does increase at several intervals, even though there have not been that many push notifications. There was also a moment when the app badge number dropped significantly, as if it had been reset, even though we had not opened the app. This suggests that there is more to the app badge than meets the eye. This is not transparent.

The in-app badges also did not correspond exactly with the number of push notifications that the user received.

In-app badges constantly appeared on Spotlight

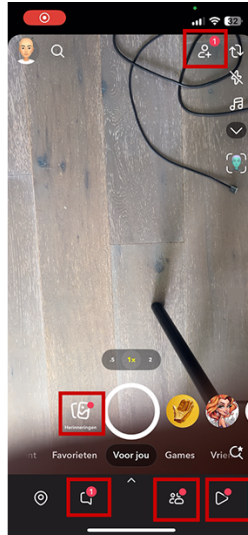


Figure 17: In-app badges

The in-app badges reappeared every time we opened the app (in the case of both once a day and four times a day). See Figure 17.

- On the Story icon (the figures at the bottom), a badge appeared only in the conditions in which we followed creators, to indicate that these creators had added a new Snap to their Story.
- A badge almost always appeared on the Spotlight icon (play symbol at the bottom), regardless of whether or not we followed accounts. Sometimes it only appeared after we had first clicked on the Story icon, causing something new to appear on the user's screen. The assumption is that this badge indicates that there are new Spotlight videos. But these are always there, so Snapchat can place a badge here an infinite number of times. The fact that the Spotlight page consists of an endless scroll with unpredictable videos suggests that this is a tactic to keep users on the platform for as long as possible.
- The comments icon on Spotlight videos has a badge on every video by default. It only disappears when the user opens the comments section, but reappears on the next video.
- The friends icon (the figure at the top with a plus sign) also regularly displayed a badge with a number to indicate how many new friend requests or suggestions there were. Because suggestions are also included here, Snapchat can place a badge here an infinite number of times.

7. QUALITATIVE STUDY FINDINGS IN DETAIL

In this chapter, a more detailed report is provided, including quotes accompanying the main insights (Chapter 4) of the qualitative study.

Snapchat is primarily used as a messaging service

Snapchat is primarily used to communicate with close friends. Users do this in both one-to-one conversations and group conversations. The younger target group (15-27) indicates that they are using WhatsApp less and less for this purpose and, for instance, use it only for specific people, such as their parents, work, family or school. Among the older target group, it is exactly the opposite: WhatsApp is their primary messaging service and they use Snapchat for specific contacts, such as their children or younger family members. Unlike in the case of WhatsApp, the messages that users send to each other on Snapchat are temporary in nature, as they are deleted after they have been viewed (or after a user-defined time).

Users consider other Snapchat features, such as Stories and Spotlight, less important

The Spotlight page and Stories are seen more as peripheral features of the app, and some users do not use them at all. While Stories are sometimes considered interesting because their friends post there, Spotlight is less interesting because it is the same concept as TikTok and Instagram Reels. Users find that the algorithm of these apps work 'better'. They say they get to see more videos that match their interests and lifestyle. Some even find Spotlight entirely unnecessary.

“On Snapchat, you mainly see girls with make-up filters, but that doesn’t interest me. On TikTok, I see more videos about facts with explanations.”

“I find it redundant. Content creators then post their videos on four different apps: Instagram Reels, YouTube Shorts, TikToks and Snapchat (Spotlight).”

“It’s annoying that all these apps are becoming increasingly similar.”

Two young people said they do use the Spotlight page when they are waiting for a chat response from a friend. That way, they stay in the app instead of switching to another one.

“When I’m waiting for a reply from friends or something, I sometimes accidentally swipe to Spotlight, and then I scroll a little further.”

TikTok and Instagram also popular; Facebook less so

Almost all the participants have experience with or use TikTok. On TikTok, they are less focused on contacting friends and more on watching public videos that the home page presents to them. But they do sometimes forward public TikTok videos to their friends.

The youngest group of participants often mentioned TikTok and Snapchat as their most used apps. For the age groups above that, they were TikTok, Instagram and WhatsApp. Instagram, like TikTok, is used to watch public videos (Reels) and to keep up with friends or people they follow. WhatsApp is used purely for direct, personal messages.

Facebook is less popular. This platform is mentioned only by participants over the age of 28 and is mainly used to communicate within specific groups to which they belong, based on a particular interest.

“Facebook has become a bit drier, and Instagram livelier.”

“Because I love whisky, I’m in a whisky group on Facebook.”

Sociale media as a habit

Social media platforms and messaging services account for a large proportion of all the participants’ screen time. Checking these apps has become part of their daily routine, for instance when participants get up in the morning or travel to work or school. Participants indicate that they sometimes spend more time on these apps than they would like. Time spent on social media platforms increases especially during periods when they are not busy or in their free time.

“Curiosity – opening the app is almost a habit, muscle memory.”

“When I get up, I immediately check my phone. When I have to get changed, I’m also on my phone. I’m on my phone in the shower.”

“Scrolling before bed. I just can’t sleep if I haven’t done that.”

Least satisfied with time spent on TikTok and Instagram

Participants are least satisfied with the time they spend on TikTok and Instagram. These are apps that allow users to keep scrolling through videos. Afterwards, they feel like they didn't get much out of it or that it didn't help them. Although young people also spend a lot of time on Snapchat, they see it as more useful than the 'scroll apps' because it's more focused on chatting with friends.

“With Snapchat, I don't mind the screen time as much because it's a means of communication. With TikTok and Instagram, it's worse: you watch those videos, but after half a minute you've already forgotten what you've seen.”

“TikTok is for scrolling, which I should actually do less of. A message may be useful, but TikTok is completely useless.” “Of course, you get a bit of a dopamine kick from it, while you're actually wasting your time.”

“I spend a lot of time on Instagram. Even when I'm on my bike, I'm watching reels, I watch them endlessly.”

“I'm really trying to do it less, especially TikTok, that awful app. At some point, you're scrolling and you think, shit, I think I've been on my phone for an hour again.”

“I want to take a quick look at TikTok because I see something interesting from a doctor, but once I start, I end up watching videos for an hour.”

Many participants are conscious of their screen time; young people less so

The majority of the participants are motivated to limit their screen time and social media use. Only the youngest group is not so concerned about possible negative consequences and is therefore less motivated to reduce their screen time.

“It's also not good for your posture.”

“I had to take my brothers to school. I had to get changed first, but I was on my phone. So they ended up being late. That was a shame.”

“I think my screen time is excessive, because there are so many other enjoyable things you can do in a day.”

“I think it’s intense when I see 4 or 5 hours, but some people have 9 to 12 hours. Then I think, okay, I’m not doing so badly.”

Participants use different tactics to reduce their usage

1. Apps that allow you to set time limits:

“I was doomscrolling a lot, so now I have the Screen Zen app, which I’ve set to 5 x 5 minutes a day.”

2. Putting the phone in a different place:

“I notice that you sleep better without devices, so I don’t want to put my phone next to my head anymore. But then I have to buy an alarm clock first.”

3. Deleting social media apps:

“During exam week, I always delete Insta. Then I have to log in on Safari, which doesn’t work very well, so that’s my tactic.”

“During the vacation, all my friends were away and I didn’t have much to do. I spent a lot of time on my phone, so I decided to delete some apps.”

4. Turning off notifications:

“Actually, you have to turn off notifications specifically, otherwise every app will eventually send you a notification.”

“I had a new phone and when you reinstall the apps, you notice that all the notifications are back on. It drove me crazy the first week.”

“I think I have a hundred apps. If you get notifications for everything, you go mad.”

“I think it’s receiving notifications that people become a bit addicted to, myself included. Since I turned them off, I actually spend much less time on my phone.”

Notifications to stay informed and be able to respond quickly

Of course, participants also see advantages to notifications: they keep you informed and allow you to respond quickly to important matters. They like that many notifications allow you to see what they are about or read part of a message. This allows them to assess whether it is important to respond immediately or whether they can leave it for later.

Interestingly, this is not the case with Snapchat’s Snaps and Chats. These only say ‘[username] sent you a chat/snap’ without displaying the content of the message.

“You can immediately check: that person has sent me a message, do I feel like responding or not?”

“But you do have to be selective about what you want to stay informed about.”

“With Snapchat, you can’t see in the notification what someone is sending you. The advantage is that you have a little more privacy when someone is sitting next to you. But there’s also a greater chance that you’ll get stuck in the app and start doing other things. With WhatsApp, if someone sends you something unimportant, you can just see what it is and swipe it away.”

Notifications as a trigger for app use

Participants acknowledge that notifications also have a negative impact on their smartphone and social media usage. These notifications trigger them to reopen the platform, where they are distracted by other content or features, causing them to spend more time on the platform than they intended.

“A message may cause a kind of chain reaction that keeps you on your phone longer.”

“You click on everything without realizing where you’re going, but it happens automatically.”

“Sometimes you want to check the time and then you see a message and get distracted again.”

“You pick up your phone and fall back into that trap of doom scrolling. And suddenly you think: What was it I was doing?”

“When you get a lot of notifications, you feel like you’re missing something.”

Notifications are turned off at specific times, on specific platforms, and for certain users

There are fixed times when participants turn off notifications because they don’t want to be disturbed during these activities: a while before bedtime, during sleep (almost everyone does this), at work and at school. One young person also mentioned that she turns off notifications in the presence of her parents, because otherwise they would be curious about who is sending her messages.

Participants turn off notifications entirely at specific times, for example using do not disturb, sleep or airplane mode. Some make sure that they can still be called.

However, when they have turned off notifications, they find themselves wondering whether any messages have come in. This causes participants to pick up their phones again to check their platforms.

“It’s not that I get messages every second, but sometimes I think, let me just check.”

“I also have notifications for messages turned off, but I do check occasionally. You can also see how often you pick up your phone; I think it’s often 100 times a day.”

Some have furthermore disabled all notifications from social media platforms by default, because they received the most (and often uninteresting) notifications from them.

“Because you get notifications for the smallest things, like when someone posts something, I think, ‘Yeah, I don’t care about that. I’ll see it when I open the app.’”

“It started during my thesis, because I was getting too many notifications. So I turned off all social media notifications, and I still have them turned off.”

“With Snapchat and Instagram, it’s not urgent enough that I need to get a notification. It’s just an extra stimulus that keeps you busy all the time, which is what I find tiring about social media.”

“I’ve set Snapchat to silent, and to keep my streaks going I just respond every evening.”

Notifications about personal messages are the most interesting, but in moderation

Participants find notifications about personal messages and interactions with their content, such as receiving likes and comments, to be the most important.

“It’s especially interesting when I’m tagged.”

“When people respond to my Story or like a photo: those are the nice notifications.”

“I mainly leave those from WhatsApp and Snapchat on, because those messages are usually important things I want to know.”

When personal messages mainly contain forwarded content and this is done excessively, participants find the notifications more annoying. A participant may then choose to mute messages from that specific friend or group of friends. The age groups we spoke to over the age of 20 were more often bothered by the number of messages they received than the age group under 20.

“Snapchat drove me crazy. Every time you got a notification, it was another friend using the bathroom.”

“On Snapchat, you get a notification when someone is typing. Merely breathing even triggers a notification.”

“I’ve turned off notifications on TikTok because my friends just send me too many TikToks.”

“On TikTok, I’m in a group chat, and one boy sends a lot of videos, maybe as many as 36 in a day, and then we tell him to stop.”

Notifications about friends’ content less interesting

Notifications about content posted by friends or accounts that the participant follows are also less interesting. Participants do not need to be updated every time new content is available.

“I’m actually considering turning off Snapchat notifications this week. Because then you also get notifications saying: ‘So-and-so has posted a Story’.”

“I don’t care that a friend posts something on Instagram five times a day.”

“Someone from your group of friends posted something, constantly, and I also received it by email, so I had to google how to turn it off again.”

“I was getting too many notifications from Snapchat from someone I added when I was thirteen, who I no longer have anything to do with. They had then posted a Story.”

Notifications about recommended content are annoying

Participants find notifications about recommended content from users they don’t know or don’t (yet) follow the least interesting and even annoying. This includes friend suggestions, where certain users are suggested. Many users don’t open these notifications, but they do look at their phone because of the notification.

“It’s strange that you receive notifications from people you don’t follow.”

“Those Facebook friend suggestions are annoying, because I don’t know those people at all.”

“Twitter or X, I get a lot of notifications from them. If you haven’t been on there for a long time, they just start giving you random notifications. That’s my theory, anyway. From accounts you might like, they drive me crazy.”

“TikTok kept sending me notifications when someone you’ve viewed posted a video. Even if you only watched ten seconds of it. And then you’d get a hundred a day.”

“You already get notifications for reminders, messages from your friends and your Story, so why would you want to get notifications from random people you don’t follow? I think that’s a bit too much on Snapchat.”

But notifications about recommended content are not specifically turned off

Nevertheless, participants rarely choose to specifically disable notifications about recommended content within the social media app in question. They find this too much hassle and often opt to disable everything at once (using the modes or all notifications from that app).

“There are so many options to turn on or off, and then I think: what am I actually turning on or off?”

“Those stories from influencers aren’t interesting. But it’s not like I’m going to go to the trouble of turning it off.”

“Confusing: sometimes you have to set something in Google or iPhone and sometimes in the app, and then I’m already confused, so I think, whatever, I’ll just do whatever.”

“Actually, I don’t really care about all those messages, so I might as well turn them all off.

From a UX perspective, it’s strange that notifications about recommended content are enabled by default: they don’t meet the user’s needs; in fact, they cause irritation. This makes it clear that the app’s design was not based on ‘a good user experience’, but mainly on factors that increase the likelihood of a user reopening the app or being reminded of it (influencing tactics).

App & in-app badges trigger clicks

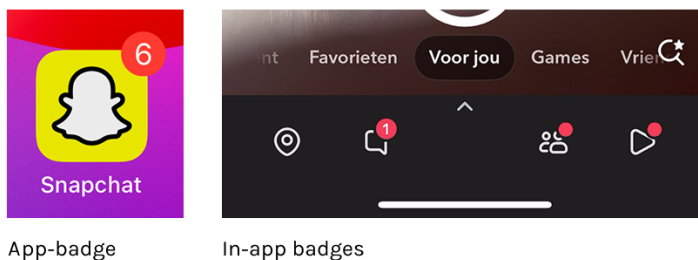


Figure 18: Badges

In addition to push notifications, social media also use app and in-app badges: the (often) red dots on an app icon or icons within the app that indicate that something new has arrived. Sometimes they have a number that indicates how many new notifications there are.

Most users say they want to clear all these badges for a calmer screen. Otherwise, it causes ‘stress’ or ‘restlessness’ or the feeling that you ‘have to’ do something.

“I don’t even know why I do it, but I have to click away all those red dots.”

“It’s to draw attention, which is sneaky and clever, of course, because you end up clicking, even though it’s not always interesting.”

“I want to get rid of it all, or it increases so much that I want nothing to do with it.”

“Sometimes when I post a comment on TikTok, I get a lot of likes. Recently, I had 2,500 likes. On TikTok, I see that red dot with 99+ likes, and then I just have to click on it.”

It is very annoying when you can't click it away, or when it often refers to uninteresting notifications. Some people therefore have their app badges turned off.

“It just clutters up my screen.” “I also had an app in which I couldn't get rid of the app badge. I wanted that red ‘1’ gone. So I just deleted the whole app.” “With WhatsApp, I know they're real messages, but with Facebook, Snapchat or TikTok, who cares? I just find it annoying.” “I have it turned off, otherwise you're confronted with how many messages you still have open.”

Participants cannot turn off **in-app badges** on most social media apps, but they do not mind them as much because they are already in the app anyway. But even these notifications may be irritating because the updates are often uninteresting to the user.

“If you're already in the app and you see one of those notification dots, I find that much less annoying than when you're on your phone and you get lots of notifications.”

“Often uninteresting, and I think because I know I often find it uninteresting, it's annoying.”

Rules for notifications

When asked whether there should be legislation regarding notifications from social media apps, participants do not have a strong opinion. Some believe that it is ultimately the user's responsibility not to be distracted or to turn off notifications.

However, the age groups above 20 indicate that they are particularly concerned about young people. They feel that young people are more sensitive to notifications, Snapstreaks and what you see on social media.

“I think when you're young, you can really lose yourself. You might be hanging around on the sofa all day with that thing.” “With today's youth and social media culture, there should be more rules and stricter supervision.” “I have the common sense to put my phone away, but younger people may not.” “Likes and streaks, that's something I found really important as a younger child.”

General ideas mentioned by participants for rules concerning social media:

“More control over what you see, what themes. Right now, it’s unpredictable.”

“An age limit on uploading videos, because sometimes I see lots of young children.”

“I’m not sure exactly what kind of regulations, but they should address the addictive nature of social media.”

“I wouldn’t mind if there were rules for notifications. Then I’d think: wow, how chill that it’s so quiet on Snapchat.”

Ideas for rules regarding notifications:

“Companies should communicate more transparently about the fact that you can also turn off notifications, for example. That also creates goodwill.”

“Maybe they could create a recognizable icon so you can immediately see whether a notification is from your friends or not.”

Participants find some Snapchat notifications misleading:

1. In a number of cases, notifications about Spotlight videos and Stories are interpreted as personal messages. This is partly due to the descriptions and partly due to the sender. Even Snapchat users, who are experienced with the app, make this mistake.
2. Some people mistake friend suggestions for friend requests.
3. Notifications about Stories do not always lead to the specific Snap in the Story that is described, but to the latest Snaps in that Story, which means that content may appear that is entirely different from what the participant expects.
4. A user can turn off notifications for recommended content, but will still receive in-app badges on Spotlight, the page where public videos from recommended creators are displayed. This means that the user cannot avoid having their attention drawn to this content.

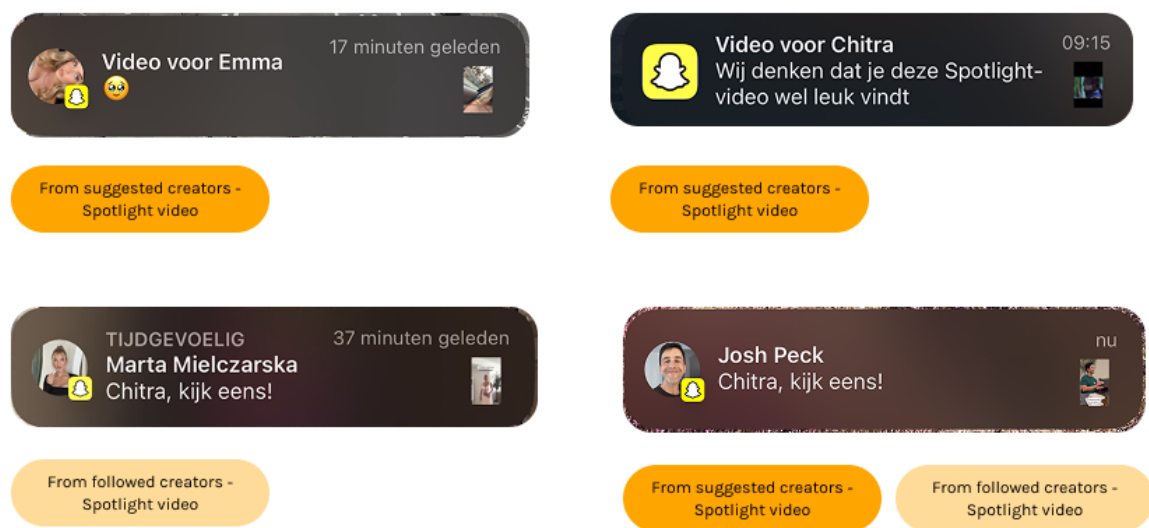


Figure 19: Notifications about Spotlight

These four ways of misleading users are explained in more detail in the following paragraphs, where we outline the responses for each type of notification.

Notifications about the Spotlight page

See Figure 19. Only in the case of the notification ‘We think you’ll like this Spotlight video’ is it immediately clear that this is a video recommended by Snapchat. Most participants are not interested in this, so these notifications are often ignored.

With regard to the rest, some think it is a personal message from another user. They initially assume that these are people they know or follow. These notifications therefore make them a lot more curious.

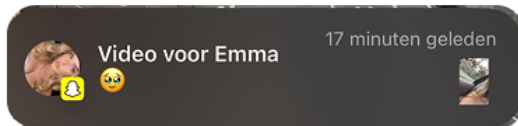
When it turns out that these notifications are about Spotlight videos (recommended or posted by someone they follow), they are disappointed and immediately lose interest.

“I don’t like these notifications because I don’t go to Snapchat specifically for Spotlight. If Spotlight didn’t exist at all, it wouldn’t really change much.”

“I understand that they might be trying to promote it. As in: ‘look, we also have a kind of Insta-reels or TikTok page’.”

“I think they’re doing it on purpose, that it’s their form of advertising. Promoting influencers.”

“I find it very strange that a random Spotlight sends you such a notification.”



“Ik denk dat dit iemand is die ik ken. ik denk niet dat onbekenden jou een Snap kunnen sturen.”

“Ik ga ervan uit dat het iemand is die ik ken, iemand kan mij alleen een bericht sturen als ik diegene heb toegevoegd.”

“Ik heb het gevoel dat iemand mij een filmpje heeft gestuurd.”

“Persoon A stuurt een foto naar mij, en heeft deze emoji als tekst toegevoegd.”

“Ik denk een Spotlight of Story van iemand die je volgt.”

“Zo’n gek highlight ding, want als het een persoonlijk bericht was, had er gestaan: Snap van die en die.”

“Ik denk dat er gewoon een verhaal zou openen van iemand, van een influencer.”

Wanneer blijkt dat het niet altijd personen zijn die men volgt of kent, en dat het geen persoonlijk bericht is:

“Nu ik erachter ben dat het iemand is die ik niet ken, vind ik het niet interessant.”

“Ik zou het prettig vinden dat er een naam bij zit zodat je weet van wie het komt.”

“Er wordt je iets opgedrongen, eerst word ik nieuwsgierig gemaakt.”

“Ik vind het wel een beetje sluw, het lijkt echt iets voor jou, maar eigenlijk is het gewoon een random video.”

Figure 20: Spotlight notification ‘Video for Emma’



“Hmmm ‘wij denken...’, oh dit is dus iemand die ik niet zou kennen.”

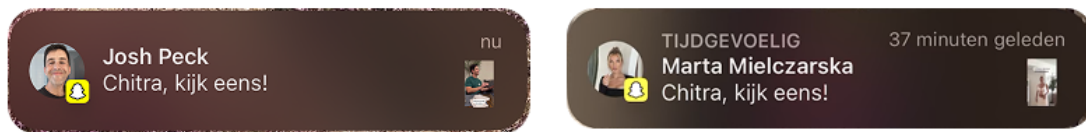
“Ik heb nog nooit zo’n video gekeken van: ‘Nou, dit was leuk.’”

“Ik denk dat je deze Spotlight-video wel leuk vindt. Ja, en dit is dus wat ik zeg over big data en dat mijn telefoon naar me luistert.”

“Hier word ik altijd een beetje recalcitrant van: dat apps gaan besluiten dat ik iets leuk vind. Nou waarschijnlijk vind ik het helemaal niet leuk.”

Figure 21: Spotlight notification ‘Video for Chitra’

Notifications about Stories



Sommigen denken dat de tekst 'kijk eens' door de gebruiker zelf getypt is als persoonlijk bericht. Ook suggereert 'tijdgevoelig' dat het om tijdelijke content gaat, maar dit is niet het geval.

"Ik dacht dat het een persoonlijk iets was, maar het was toch weer zo'n reel, misleidend"

"Deze tekst is pakkender waardoor je gaat kijken, het lijkt of diegene mij kent."

"Dit ziet er persoonlijk uit, je ziet zijn naam en kijk eens."

"Dit is een video gestuurd via chat?"

"Tijdgevoelig, dat betekent dat het na bepaalde tijd weer verdwijnt."

Wanneer blijkt dat het niet altijd personen zijn die men volgt of kent, en dat het geen persoonlijk bericht is:

"Ik vind het irritant dat ze op je gevoel inspelen van 'kijk eens'"

"Dit is bijna zo'n instinker als hee mam m'n telefoon is weg."

"Het lijkt alsof ik Marta ken, en alsof zij mij iets heeft gestuurd maar dat is dus niet het geval."

"Ik werd misleid, weer zo'n Spotlight video, ik dacht dat hij me zelf wat stuurde."

Figure 22: Spotlight notifications 'Watch this'

Users recognize from their own experience that they receive notifications about Stories from other users. If it's not a close friend, they are often not interested. These notifications are seen as unnecessary because they never contain urgent information that specifically concerns them. Users prefer to view Stories at a time that suits them, when they already have the app open. It becomes annoying when they have swiped away this notification but it reappears after a short time because the person has added something new to their Story.

"Stories don't really interest me. If you want me to see it, send it to me personally."

"If it's someone you don't know well, I wouldn't click on it."

"Then it never stops. If I get notifications when people I follow post something, my phone explodes."

They expect to receive notifications only from the Stories of users they are friends with or whom they follow. They see no point in receiving notifications from other users' Stories. When we show them that this is in fact sometimes the case, participants find it annoying.

“I wish you could turn off sponsored content.”

“If you see a Story from someone who’s in your contacts, for example, I would find that quite annoying, because I have so many people in my contacts whose Snaps I don’t need to see.”

“I only want this from people I follow.”

Only the notification ‘[username] has added Snaps to their Story’ makes it clear that it is a Story (see Figure 23). In the case of the other two notifications in the figure, some people make the mistake of thinking it is a personal message. And that works: the text written by the user themselves makes people more curious than the text describing that the user has added Snaps to their Story.

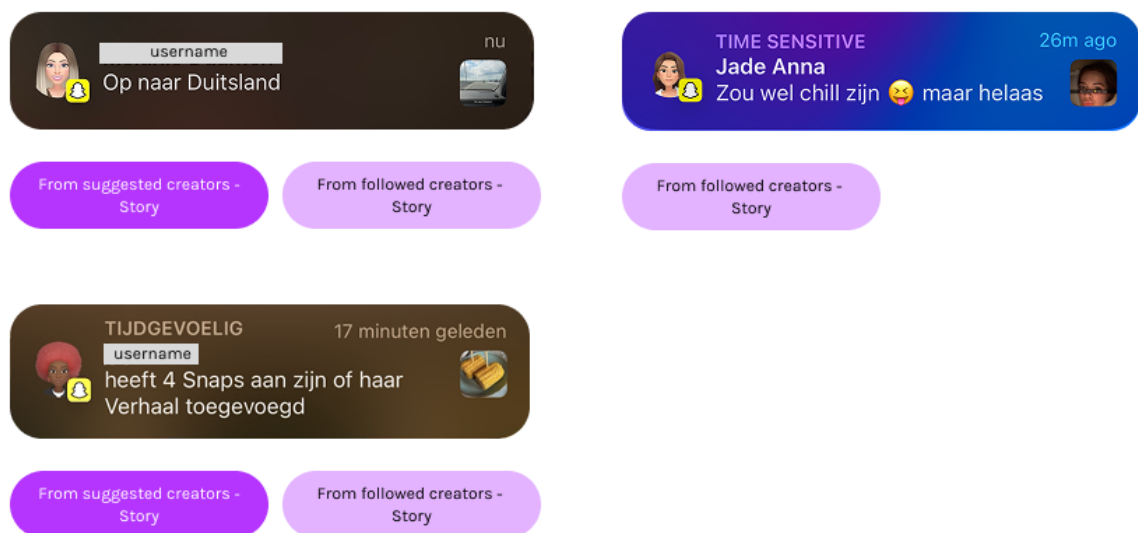
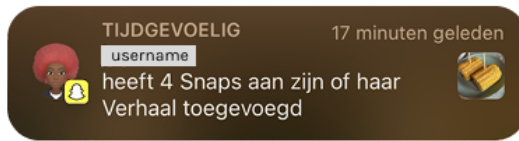


Figure 23: Notifications about Stories

Notifications about friend suggestions

When it comes to notifications about friend suggestions (see Figure 27), participants often think that it is a friend **request**; that another user wants to add them. In reality, this is a user **suggested** by Snapchat. Participants want to receive notifications for friend requests, but not for friend suggestions. Users do not often add other users suggested by Snapchat.



"Ik zou meteen notificaties uitzetten als ik dit kreeg."

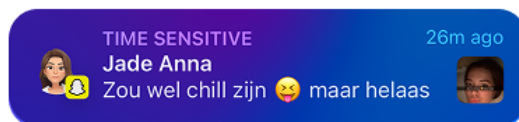
"Die volg ik waarschijnlijk, maar ik zit niet op die Verhalen te wachten."

"Dit is denk ik een bekende, anders zou ik die melding niet krijgen."

"Tijdgevoelig, geeft wat druk erachter."

"Tijdgevoelig, dan proberen ze duidelijk te maken dat je snel moet kijken, anders is het weg. Nou, ik ben daar niet gevoelig voor."

Figure 24: Story notification 'added to their Story'



"Iemand die ik ken, die heeft iets gezien en dat wil ze delen met mij."

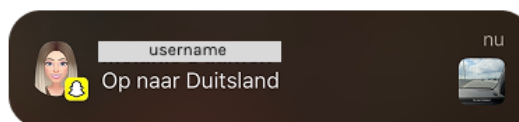
"Ik denk dat dit van je abonnementen is, van iemand die je volgt. Een verhaal."

"Je ziet time sensitive, dus ik denk dat het een verhaal is."

Bij deze notificatie lieten we zien dat er soms een ander (inmiddels nieuw) Verhaal wordt getoond, dan waar de notificatie naar verwijst. Dat is misleidend, omdat men een totaal andere inhoud verwacht.

"Raar dat als je er op klikt, je heel ergens anders uit komt."

Figure 25: Story notification with description of user time-sensitive



"Ik denk een privébericht."

"Ik ben nu wel nieuwsgierig, je wil toch kijken wat mensen doen of zeggen."

"Volgens mij is dit ook weer zo'n Story, maar dat je wel de titel erbij ziet."

Figure 26: Story notification with description of user



"Dat vind ik wel misleidend: ik dacht dat diegene me had toegevoegd"
"Ik vind het ook verwarrend: je denkt dit is een vriendschapsverzoek, maar het is alleen een voorstel, dat had ik eerst niet door."
"Meestal als ik dat zie dan denk ik dat iemand me wil toevoegen."
"Dit lijkt op een random guy die gewoon mensen aan het toevoegen is."
"Ik zou het gek vinden als Snapchat mij een bericht stuur met: hey kijk wie ik voor jou gevonden heb. Dan ga ik me afvragen of mijn telefoon dichtbij deze persoon is gekomen."

Figure 27: Friend suggestion notification

When a user clicks on a notification of a friend request or suggestion, they are taken to a list of friend suggestions. This list shows whether the person is in your contacts, whether you have mutual friends, or nothing at all. Especially in the latter case, participants wonder why these users are being recommended:

"Maybe we live near each other or go to the same places.
That's still bad use of my data."

"It could be that they are placing people here based on your
search behavior."

"I might know the ones with mutual friends, having met them
at a birthday party, for example."

"It is a bit strange to connect people who don't know each
other at all."

Snapchat in-app badges

There are no settings that give the user control over in-app badges. For example, a red dot regularly appears on the Spotlight badge, even if the user has set their preferences to not receive notifications about recommended content. The in-app badges are therefore not considered 'notifications'.

See Figure 28. Users find the in-app badges (the red dots) on the **chat icons** and **friend request icons** particularly interesting. This allows them to see immediately whether they have new personal messages or new friend requests. But in the latter case the red dot may also be a friend request. Snapchat makes clever use of this, because Snapchat itself can determine when to send such a request, and therefore also when a red dot appears.

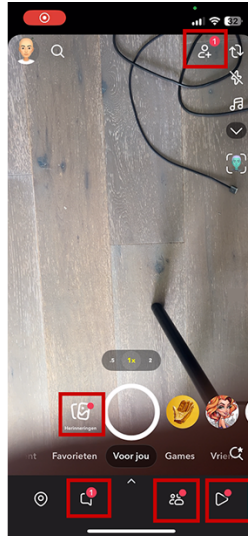


Figure 28: In-app badges

“I think a red dot also appears if Snapchat decides that you might be able to become friends with someone. Because then you think: hey, I have a friend request. But that need not be the case.”

“I always look at the friends icon, but I find it annoying because I don’t know any of them. They’re all friends of my niece that I have on Snap.”

Participants find the badge on the **Story icon** less interesting, but it does make them curious about what their friends have posted.

“I’m inclined to click on that red dot, it’s likely to be something from a person you follow.”

The badge on the **Spotlight icon** appears every few minutes, but seems to indicate only that there are new recommended videos. This is strange, because there will always be newly posted videos on this page, so Snapchat can decide for itself when to display such a badge.

“It’s strange that there’s always a red dot on the Spotlight. There are endless videos, so there’s always something new.”

“Well, you see, I think Spotlight is a bit pointless, because there’s always new content.”

“I actually find it very strange. Because it’s such a never-ending red dot.”

“I think it just appears randomly on the Spotlight. I think this dot reappears after a few hours.”

“I think it means there might be something interesting in there for you. Which is why you got a push notification.”

Participants think Snapchat puts a badge on it to get them to click even more and spend more time on the app. They have a point: by regularly displaying a red dot in Spotlight, Snapchat lures users to that page. And that happens to be the page where an endless scroll is used with unpredictable, personalized videos; a mechanism notorious for retaining users’ attention.

“On Snapchat, a red dot appears on Spotlight when someone has posted a video. That’s clearly another way they try to get you into the app. It’s just like TikTok. I almost always ignore it because it’s always pointless stuff, but I do watch messages.”

8. RESEARCH JUSTIFICATIONS

This research consisted of a case study and qualitative semi-structured interviews with the target group. A logbook was kept of the case study and added to the appendix (see Appendix 3). The interview guide has also been added to the appendix (see Appendix 5). Because the interview was semi-structured, this questionnaire was not administered verbatim, but rather served as a guide for topics to be discussed. The interviews mainly consisted of open-ended questions, without using leading terms. The interviews were recorded and transcribed. The transcripts were used to arrive at the insights in this report and to quote participants.

Participants in the study were selected through an external respondents agency. This agency has a large international panel, to which participants register if they wish to be invited to participate in market or other research. Based on our selection briefing (see Appendix 4 for the criteria), the agency selected participants for the study from their panel. Participants received an incentive for their participation.

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10. APPENDICES

The following pages contain the appendices to this report. These have their own page numbering.

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1. DEFINITIONS OF NOTIFICATION AND SNAPCHAT

1.1 NOTIFICATIONS

Notifications are short signals that can be visual, auditory or haptic (tactile, such as a vibration) and can be received at any time on a device (laptop, tablet, smart-watch, smartphone, etc.). They contain information about software, applications or functions that the user is generally not using at that time.

They are sent by the software or apps installed on the user's device. This lets the user know that new information is available without them having to open the application first.

We distinguish between four types of notifications: **push notifications**, **in-app notifications**, **app badges** and **in-app badges**.

Notifications and settings may vary depending on the app and phone. Our report and definitions are therefore based on **Snapchat on iPhone iOS 18**.

1.1.1 PUSH NOTIFICATIONS



Figure 1: Example push notification

This is the most invasive form of notification. Push notifications appear directly on the user's screen, especially if the user has not opened the corresponding app. They can appear when the phone is unlocked or locked. On a locked iPhone, the screen often lights up when a notification arrives.

The notification usually provides a summary or preview of the content. Examples include receiving a message from another user, alerting the user to a new feature in the app, or requesting an action from the user, such as updating contact details.

The layout is uniform; push notifications from different apps have the same appearance in terms of structure. They often contain a title, text and an image, providing a summary of the information that would appear if you were to tap on the notification.

On iPhones, push notifications are collected in a notification/message center on the access screen. Here, you can see which notifications have been received. After you tap on push notifications, they usually disappear from the notification center. On many phones, you can customize push notifications according to your preferences, both in general and per app.

On iPhones, you can choose to turn off push notifications entirely. You can also choose to receive notifications immediately, the moment they are sent (if you are connected to the internet), or to receive a scheduled overview, with push notifications arriving at pre-set times. You can furthermore choose whether notifications are accompanied by a sound/vibration or whether this feature is disabled.

Finally, you can specify whether push notifications should appear on the locked screen, in the notification center and/or in banners. Banners are the push notifications that appear when the phone is unlocked. You can set whether those banners should remain on the screen or disappear automatically.



Figure 2: Setting notifications

Time-sensitive notifications

Time-sensitive push notifications were introduced in iOS 15. These are notifications that are considered more important/urgent than others and can therefore bypass certain focus modes, such as 'do not disturb'. You can enable or disable this type of notification for each app individually. Time-sensitive notifications remain on the lock screen for one hour. After that, they can be found in the notification center.

1.1.2 IN-APP NOTIFICATIONS

These notifications appear only when you are in the app that sends them. How they look and whether they are sent depends entirely on the app. However, they differ in format from regular push notifications (which are sent across apps, rather than within the app). If you have push notifications turned off, you will still receive in-app notifications. On iPhones, there is no setting to turn off in-app notifications, nor is there a setting for this in Snapchat.

1.1.3 APP BADGES

This is a colored (usually red) dot with a number inside it that appears on the app icon on the phone's unlocked home screen. The number indicates how many new/unseen notifications there are per app. As soon as you click on the app icon and open the app, the badge disappears.

On iPhones, you can set whether or not you want to see app badges for each app.

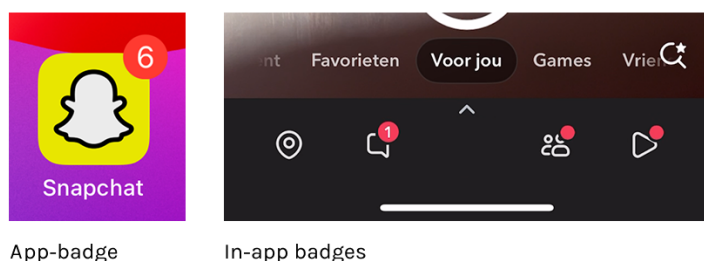


Figure 3: App-badges and in-app badges

1.1.4 IN-APP BADGES

These are colored dots (often red, sometimes with a number and sometimes without) that indicate within the app which sections contain new/unseen information for the user. After you click on these sections, the dot disappears. On iPhones, there is no setting to turn off in-app badges, nor is there a setting for this in Snapchat.

1.2 SNAPCHAT NOTIFICATIONS

Below is an overview of all types of notifications that Snapchat sends:

Type	Description	Default
Bitmojis in Notifications	Show Friends' Bitmojis in your phone's push notifications	On
Mentions	Get notifications when someone tags you in a Snap	On
Memories	Get occasional notifications about your memories	On
Dreams suggestions	Get occasional notifications about your Dreams suggestions	Off

Type	Description	Default
Friends' Birthdays	Get occasional notifications so you don't miss any important birthdays	On
Message Reminders	Get occasional notifications about unopened Snaps or Chats	On
Creative Effects	Get notifications about Lenses, Filters, Stickers and other editing tools!	On
Best Friend Message Sounds	Snaps and Chats from Best Friends will make a special sound	On
Story posts	Get occasional notifications about the Snaps you've submitted to Spotlight and Snap Map	On
Map notifications	Get occasional notifications about friend Snap Map activity and new Place submissions	On
Pin My Friend Widget	Receive notifications when your friends pin you to their lock screen	On
Comments	Receive notifications related to comments	On
Creator notifications - pay out	Manage notifications related to your public profile and content - You will receive notifications about payouts	On
Creator notifications - performance milestones	Manage notifications related to your public profile and content - Enable to get updates when your content or profile reaches significant milestones	On
Promotions	Receive occasional notifications about promotions for Snapchat+, Bitmoji and other features	On
Snapchat+	Receive occasional notifications about Snapchat+ including new updates, subscription changes and more	On
Friends from contacts	Get notified of phone contacts on Snapchat that you may know	On
Friend suggestions	Get notified of friends on Snapchat that you may know!	On
Pending friends	Get notified of pending friends: Snapchatters who have already added you!	On
From creators you've added	Get notified occasionally when creators you've added share content to Stories, Spotlight and Discover	On
From your contacts	Get notified occasionally when a friend from your contacts shares content to Stories, Spotlight and Discover	On
From suggested creators	Get notified occasionally when we find content we think you'll like	On
Private stories from friends	Get notified occasionally when friends add to their Private Story	On
Stories from friends	Get notified when your friends add to their Story!	On

Type	Description	Default
SMS: Transactional messages	Get Message or Friend activity alerts, Story reminders, account info and more	On
SMS: Promotional message	Get friend suggestions, new Lens updates and more	Off

1.3 PAGES AND FEATURES WITHIN SNAPCHAT

Users can share and view different types of content via various pages on Snapchat. The most important pages that we also cover in our research are the Chat page, Add Friends page, Story page, and Spotlight page.

1.3.1 CHAT

The most commonly used feature of Snapchat is the chat function. This is the page where users can send direct messages to friends. Chat messages are automatically deleted after being opened (unless otherwise set). In addition to typed messages, users can also send a **Snap**. This is a photo or short video that can be edited in various ways by the sender. For example, a filter can be applied, or text can be placed over the photo. Usually, the recipient can open it only once, so it is not saved in the chat (unless otherwise set). Group chats can also be created on the Chat page.

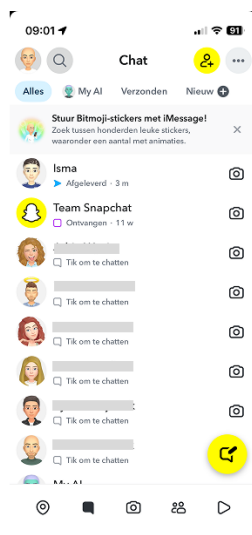


Figure 4: Chat

1.3.2 ADDING FRIENDS

This page displays all the friend requests and friend suggestions made by Snapchat. Users can also search for accounts to add themselves. Sometimes friend suggestions include an explanation of why the suggestion is being made: for example,

because this person is in the user's phone contacts or because they have mutual friends.

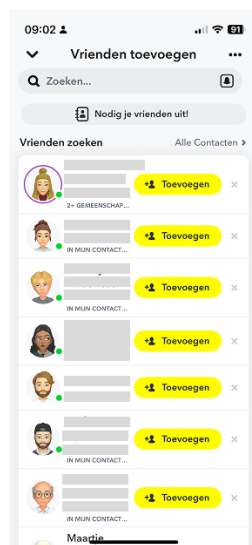


Figure 5: Adding friends

1.3.3 STORIES

Unlike the Chat function, where you send Snaps to specific friends or groups and they can only be opened once, you can also add Snaps to your **Story**. Here, each Snap remains available for 24 hours and the Snaps are displayed chronologically one after the other. When a viewer clicks on your Story, they will first see the oldest Snap, and by tapping each time they will see the next Snap in your Story.

There are different types of Stories that determine which audience sees your Story:

- **My Story - friends only:** Only you can add Snaps and only your friends can see this Story;
- **Private Story:** Only you can add Snaps, and only selected friends can see this Story;
- **Shared Story:** You and selected friends can add Snaps to this story and view it;
- **My Story - public:** Only you can add Snaps, and anyone can view this Story.

On the **Stories page**, you will find Stories from friends and public profiles you follow. Recommended Stories are listed under the heading 'Discover'.

1.3.4 SPOTLIGHT

This page consists of an endless scroll where the user sees full-screen videos. By scrolling down, you will see the next video. This feed is a mix of recommended personalized content and content from accounts that the user follows. If 'personalization' is turned off, you will not see personalized videos here, but popular content and content from accounts that you follow.

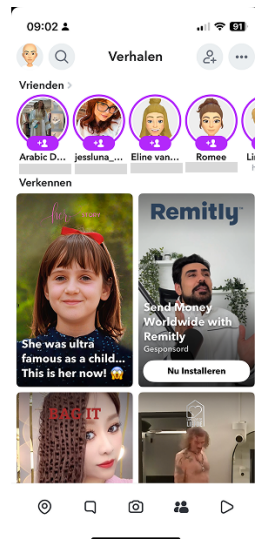


Figure 6: Stories



Figure 7: Spotlight

2. CASE STUDY: TABLE TYPES OF NOTIFICATIONS RECEIVED

Type	Screenshot & info						
From suggested creators - Spotlight video Con1: 8 Con2: 14 Con3: 8 Con4: 2 Con5: 4 Con6: 0 Total: 36	 <div> Title: Video for Ismail Text: [Description for the video] Code: A1 </div>						
	Con1: 3	Con2: 1	Con3: 2	Con4: 0	Con5: 2	Con6: 0	Total: 8
	 <div> Title: Video for Ismail Text: [Description for the video] Extra: No picture Code: A2 </div>						
	Con1: 0	Con2: 1	Con3: 0	Con4: 0	Con5: 0	Con6: 0	Total: 1
	 <div> Title: Video for Ismail Text: We think you'll like this Spotlight video Code: A3 </div>						
	Con1: 5	Con2: 2	Con3: 0	Con4: 2	Con5: 2	Con6: 0	Total: 11
	 <div> Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: No picture Misleading because it states that you follow a certain creator even though we did not follow anyone. Code: A4 </div>						
	Con1: 0	Con2: 1	Con3: 0	Con4: 0	Con5: 0	Con6: 0	Total: 1
	 <div> Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: Misleading because it states that you follow a certain creator even though we did not follow anyone. Code: A5 </div>						
	Con1: 0	Con2: 3	Con3: 2	Con4: 0	Con5: 0	Con6: 0	Total: 5
	 <div> Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: Time sensitive Misleading because it states that you follow a certain creator even though we did not follow anyone. And it's a time sensitive notification even though Spotlight posts are not temporary content Code: A6 </div>						
	Con1: 0	Con2: 6	Con3: 2	Con4: 0	Con5: 0	Con6: 0	Total: 8
	 <div> Title: [Name of suggested creator] Text: Ismail, watch this! Extra: No picture Misleading because it looks like a message from the creator, telling them to watch something. But it's actually Snapchat that generates this. Code: A7 </div>						
	Con1: 0	Con2: 0	Con3: 1	Con4: 0	Con5: 0	Con6: 0	Total: 1
	 <div> Title: [Name of suggested creator] Text: Ismail, watch this! Extra: Time sensitive Misleading because it looks like a message from the creator, telling them to watch something. But it's actually Snapchat that generates this. And it's a time sensitive notification even though Spotlight posts are not temporary content Code: A8 </div>						
	Con1: 0	Con2: 0	Con3: 1	Con4: 0	Con5: 0	Con6: 0	Total: 1

Figure 8: Spotlight - suggestions





Type	Screenshot & info							
From followed creators - Spotlight video	<div><div><div><div><div></div><div>Speed</div></div><div><div>Ismail, watch this!</div><div></div></div></div><div>27m ago</div></div><div><p>Title: [Name of followed creator] Text: Ismail, watch this! Extra: Misleading because it looks like a message from the creator, telling them to watch something. But it's actually Snapchat that generates this. Code: B1</p><table><tr><td>Con1: 0</td><td>Con2: 0</td><td>Con3: 0</td><td>Con4: 1</td><td>Con5: 1</td><td>Con6: 1</td><td>Total: 3</td></tr></table></div></div>	Con1: 0	Con2: 0	Con3: 0	Con4: 1	Con5: 1	Con6: 1	Total: 3
	Con1: 0	Con2: 0	Con3: 0	Con4: 1	Con5: 1	Con6: 1	Total: 3	
	<div><div><div><div><div></div><div>TIME SENSITIVE Spotlight post by Glen Fontein</div></div><div><div>Stream glenfontein</div><div></div></div></div><div>53m ago</div></div><div><p>Title: Spotlight post by [Name of followed creator] Text: (Description for the video) Extra: Time sensitive Misleading because it's a time sensitive notification even though Spotlight posts are not temporary content Code: B2</p><table><tr><td>Con1: 0</td><td>Con2: 0</td><td>Con3: 0</td><td>Con4: 1</td><td>Con5: 0</td><td>Con6: 0</td><td>Total: 1</td></tr></table></div></div>	Con1: 0	Con2: 0	Con3: 0	Con4: 1	Con5: 0	Con6: 0	Total: 1
	Con1: 0	Con2: 0	Con3: 0	Con4: 1	Con5: 0	Con6: 0	Total: 1	
<div><div><div><div><div></div><div>TIME SENSITIVE Glen Fontein</div></div><div><div>Ismail, watch this!</div><div></div></div></div><div>8m ago</div></div><div><p>Title: [Name of followed creator] Text: Ismail, watch this! Extra: Time sensitive Misleading because it looks like a message from the creator, telling them to watch something. But it's actually Snapchat that generates this. And it's a time sensitive notification even though Spotlight posts are not temporary content Code: B3</p><table><tr><td>Con1: 0</td><td>Con2: 0</td><td>Con3: 0</td><td>Con4: 3</td><td>Con5: 0</td><td>Con6: 0</td><td>Total: 3</td></tr></table></div></div>	Con1: 0	Con2: 0	Con3: 0	Con4: 3	Con5: 0	Con6: 0	Total: 3	
Con1: 0	Con2: 0	Con3: 0	Con4: 3	Con5: 0	Con6: 0	Total: 3		
From suggested creators - Story	<div><div><div><div><div></div><div><div></div><div>Added to their Story.</div></div></div><div>now</div></div><div><p>Title: [Name of suggested creator] Text: Added to their Story Code: C1</p><table><tr><td>Con1: 2</td><td>Con2: 0</td><td>Con3: 0</td><td>Con4: 0</td><td>Con5: 0</td><td>Con6: 0</td><td>Total: 2</td></tr></table></div></div></div>	Con1: 2	Con2: 0	Con3: 0	Con4: 0	Con5: 0	Con6: 0	Total: 2
	Con1: 2	Con2: 0	Con3: 0	Con4: 0	Con5: 0	Con6: 0	Total: 2	
<div><div><div><div><div></div><div>Yashi Tank</div></div><div><div>Made this stunning mirror Jeans at home 🥰</div><div></div></div></div><div>now</div></div><div><p>Title: [Name of suggested creator] Text: [Description for the video] Extra: Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification Code: C2</p><table><tr><td>Con1: 2</td><td>Con2: 2</td><td>Con3: 0</td><td>Con4: 1</td><td>Con5: 0</td><td>Con6: 0</td><td>Total: 5</td></tr></table></div></div>	Con1: 2	Con2: 2	Con3: 0	Con4: 1	Con5: 0	Con6: 0	Total: 5	
Con1: 2	Con2: 2	Con3: 0	Con4: 1	Con5: 0	Con6: 0	Total: 5		

Figure 9: Spotlight - followed, Stories - suggestions








Type	Screenshot & info						
<div>Friend suggestions</div> <div>Con1: 18 Con2: 7 Con3: 0 Con4: 2 Con5: 0 Con6: 0 Total: 27</div>	<div> Snapchat 1h ago You have a new friend suggestion!</div>			Title: Snapchat Text: You have a new friend suggestion! Extra: No picture Code: E1			
	Con1: 1	Con2: 0	Con3: 0	Con4: 0	Con5: 0	Con6: 0	Total: 1
	<div> Eem 03:59 Ismail, you have a new friend suggestion!</div>			Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion! Extra: Picture on right instead of left Code: E2			
	Con1: 0	Con2: 1	Con3: 0	Con4: 0	Con5: 0	Con6: 0	Total: 1
	<div> Gauri 22m ago Ismail, you have a new friend suggestion!</div>			Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion! Code: E3			
	Con1: 16	Con2: 6	Con3: 0	Con4: 2	Con5: 0	Con6: 0	Total: 24
	<div> Evelyn 1h ago Ismail, you have a new friend suggestion from your contacts!</div>			Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion from your contacts! Code: E4			
	Con1: 1	Con2: 0	Con3: 0	Con4: 0	Con5: 0	Con6: 0	Total: 1
<div>Creative effects</div> <div>Con1: 4 Con2: 3 Con3: 0 Con4: 1 Con5: 1 Con6: 0 Total: 9</div>	<div> Ismail, try this Lens! 30m ago Smiley Mouth</div>			Title: Ismail, try this Lens! Text: [Name of Lens] Code: F1			
	Con1: 4	Con2: 3	Con3: 0	Con4: 1	Con5: 1	Con6: 0	Total: 9
<div>Message reminders</div> <div>Con1: 1 Con2: 1 Con3: 0 Con4: 0 Con5: 0 Con6: 1 Total: 3</div>	<div> TIME SENSITIVE 6m ago Team Snapchat sent you a Chat</div>			Title: Team Snapchat Text: sent you a chat Extra: Time sensitive Code: G1			
	Con1: 1	Con2: 1	Con3: 0	Con4: 0	Con5: 0	Con6: 0	Total: 2
	<div> Team Snapchat 1h ago sent you a Snap</div>			Title: Team Snapchat Text: sent you a Snap Code: G2			
	Con1: 0	Con2: 0	Con3: 0	Con4: 0	Con5: 0	Con6: 1	Total: 1

Figure 11: Friend suggestions, Creative effects, Message reminders

3. CASE STUDY: LOGBOOK OF NOTIFICATIONS RECEIVED


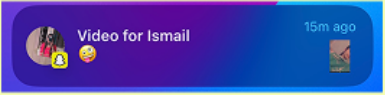

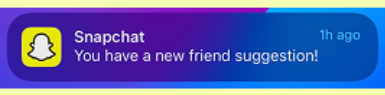

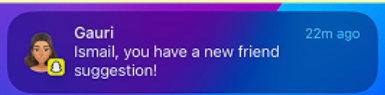

Condition 1: Not following not opening		
Day 1: 17:14 25/06/2025 - 17:13 26/06/2025 Day 2: 17:14 26/06/2025 - 17:13 27/06/2025 Day 3: 17:14 27/06/2025 - 17:13 28/06/2025 Day 4: 17:14 28/06/2025 - 17:13 29/06/2025 Day 5: 17:14 29/06/2025 - 17:13 30/07/2025		
Day 1	Screenshot	Info
		Time seen: 17:14 dd/mm/yyyy: 25/06/2025
		Time sent: 9:43 dd/mm/yyyy: 26/06/2025 Title: Video for Ismail Text: [Description for the video]
		Time seen: 9:59 dd/mm/yyyy: 26/06/2025
		Time sent: 12:13 dd/mm/yyyy: 26/06/2025 Title: Snapchat Text: You have a new friend suggestion! Extra: No picture
		Time seen: 13:13 dd/mm/yyyy: 26/06/2025
		Time sent: 16:55 dd/mm/yyyy: 26/06/2025 Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion!
		Time seen: 17:13 dd/mm/yyyy: 26/06/2025

Figure 12: Logbook

Day 2	Screenshot	Info	Type
		Time sent: 18:03 dd/mm/yyyy: 26/06/2025 Title: Ismail, try this Lens! Text: [Name of Lens]	Creative effects Code: F1
		Time sent: 18:27 dd/mm/yyyy: 26/06/2025 Title: Team Snapchat Text: sent you a Chat Extra: Time sensitive	Message reminders Code: G1
		Time seen: 18:39 dd/mm/yyyy: 26/06/2025	
		Time seen: 19:03 dd/mm/yyyy: 26/06/2025	
		Time sent: 19:03 dd/mm/yyyy: 26/06/2025 Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion!	Friend suggestions Code: A1
		Time sent: 20:09 dd/mm/yyyy: 26/06/2025 Title: [Name of suggested creator] Text: Added to their story	From suggested creators - Story Code: A1
		Time seen: 20:10 dd/mm/yyyy: 26/06/2025	
		Time sent: 21:11 dd/mm/yyyy: 26/06/2025 Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion!	Friend suggestions Code: E3
		Time seen: 21:50 dd/mm/yyyy: 26/06/2025	
		Time sent: 22:20 dd/mm/yyyy: 26/06/2025 Title: Video for Ismail Text: We think you'll like this Spotlight video	From suggested creators - Spotlight video Code: A3
		Time seen: 22:30 dd/mm/yyyy: 26/06/2025	
		Time seen: 22:31 dd/mm/yyyy: 26/06/2025	
		Time sent: 23:27 dd/mm/yyyy: 26/06/2025 Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion!	Friend suggestions Code: E3

Figure 13: Logbook

Day 2	Screenshot	Info	Type
		Time sent: 7:37 dd/mm/yyyy: 27/06/2025 Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion!	Friend suggestions Code: E3
		Time seen: 7:40 dd/mm/yyyy: 27/06/2025	
		Time sent: 8:38 dd/mm/yyyy: 27/06/2025 Title: [Name of suggested creator] Text: Added to their story	From suggested creators - Story Code: C1
		Time seen: 8:38 dd/mm/yyyy: 27/06/2025	
		Time sent: 10:42 dd/mm/yyyy: 27/06/2025 Title: Video for Ismail Text: [Description for the video]	From suggested creators - Spotlight video? Code: A1
		Time seen: 10:52 dd/mm/yyyy: 27/06/2025	
		Time sent: 15:06 dd/mm/yyyy: 27/06/2025 Title: [Name of suggested friend] Text: Ismail you have a new friend suggestion!	Friend suggestions Code: E3
		Time seen: 15:51 dd/mm/yyyy: 27/06/2025	
Day 3	Screenshot	Info	Type
		Time sent: 17:11 dd/mm/yyyy: 27/06/2025 Title: [Name of suggested friend] Text: Ismail you have a new friend suggestion! Extra: No picture	Friend suggestions Code: E2
		Time seen: 17:39 dd/mm/yyyy: 27/06/2025	
		Time sent: 18:07 dd/mm/yyyy: 27/06/2025 Title: Ismail, try this Lens! Text: [Name of Lens]	Creative effects Code: F1
		Time seen: 18:08 dd/mm/yyyy: 27/06/2025	

Figure 14: Logbook

Day 3	Screenshot	Info	Type
		Time sent: 19:29 dd/mm/yyyy: 27/06/2025 Title: [Name of suggested friend] Text: Ismail you have a new friend suggestion!	Friend suggestions Code: E3
		Time seen: 20:18 dd/mm/yyyy: 27/06/2025	
		Time sent: 21:42 dd/mm/yyyy: 27/06/2025 Title: [Name of suggested friend] Text: Ismail you have a new friend suggestion!	Friend suggestions Code: E3
		Time seen: 22:05 dd/mm/yyyy: 27/06/2025	
		Time sent: 22:42 dd/mm/yyyy: 27/06/2025 Title: Video for Ismail Text: We think you'll like this Spotlight video	From suggested creators - Spotlight video Code: A3
		Time seen: 23:38 dd/mm/yyyy: 27/06/2025	
		Time sent: 7:34 dd/mm/yyyy: 28/06/2025 Title: [Name of suggested friend] Text: Ismail you have a new friend suggestion!	Friend suggestions Code: E3
		Time seen: 7:34 dd/mm/yyyy: 28/06/2025	
		Time sent: 8:45 dd/mm/yyyy: 28/06/2025 Title: [Name of suggested creator] Text: [Description for the video] Extra: Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification	From suggested creators - Story Code: C2
		Time seen: 8:45 dd/mm/yyyy: 28/06/2025	
		Time sent: 10:54 dd/mm/yyyy: 28/06/2025 Title: Video for Ismail Text: [Description for the video]	From suggested creators - Spotlight video? Code: A1
		Time seen: 11:34 dd/mm/yyyy: 28/06/2025	

Figure 15: Logbook

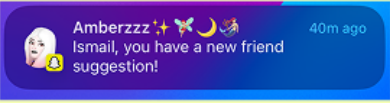

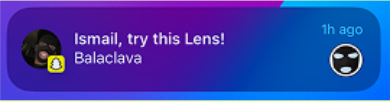
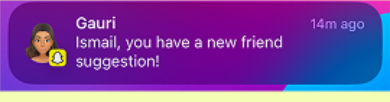

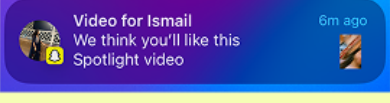


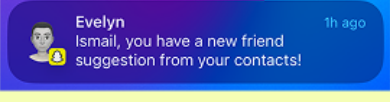

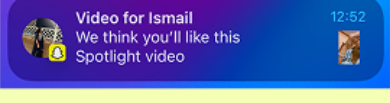
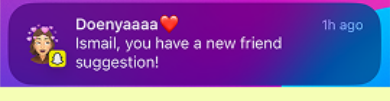
Day 4	Screenshot	Info	Type
		Time sent: 18:52 dd/mm/yyyy: 28/06/2025 Title: [Name of suggested friend] Text: Ismail you have a new friend suggestion!	Friend suggestions Code: E3
		Time seen: 19:32 dd/mm/yyyy: 28/06/2025	
		Time sent: 20:17 dd/mm/yyyy: 28/06/2025 Title: Ismail, try this Lens! Text: [Name of Lens]	Creative effects Code: F1
		Time sent: 21:03 dd/mm/yyyy: 28/06/2025 Title: [Name of suggested friend] Text: Ismail you have a new friend suggestion!	Friend suggestions Code: E3
		Time seen: 21:17 dd/mm/yyyy: 28/06/2025	
		Time sent: 23:11 dd/mm/yyyy: 28/06/2025 Title: Video for Ismail Text: We think you'll like this Spotlight video	From suggested creators - Spotlight video Code: A3
		Time sent: 08:39 dd/mm/yyyy: 29/06/2025 Title: [Name of suggested friend] Text: Ismail you have a new friend suggestion!	Friend suggestions Code: E3
		Time seen: 08:52 dd/mm/yyyy: 29/06/2025	
		Time sent: 11:07 dd/mm/yyyy: 29/06/2025 Title: [Name of suggested friend] Text: Ismail you have a new friend suggestion from your contacts!	Friend suggestions Code: E4
		Time seen: 12:07 dd/mm/yyyy: 29/06/2025	
		Time sent: 12:52 dd/mm/yyyy: 29/06/2025 Title: Video for Ismail Text: We think you'll like this Spotlight video	From suggested creators - Spotlight video Code: A3
		Time sent: 16:20 dd/mm/yyyy: 29/06/2025 Title: [Name of suggested friend] Text: Ismail you have a new friend suggestion!	Friend suggestions Code: E3

Figure 16: Logbook

Day 5	Screenshot	Info	Type
		Time seen: 17:20 dd/mm/yyyy: 29/06/2025	
		Time sent: 18:13 dd/mm/yyyy: 29/06/2025 Title: [Name of suggested friend] Text: Ismail you have a new friend suggestion!	Friend suggestions Code: E3
		Time seen: 18:30 dd/mm/yyyy: 29/06/2025	
		Time sent: 20:56 dd/mm/yyyy: 29/06/2025 Title: [Name of suggested friend] Text: Ismail you have a new friend suggestion!	Friend suggestions Code: E3
		Time sent: 21:33 dd/mm/yyyy: 29/06/2025 Title: Ismail, try this Lens Text: [Name of Lens]	Creative effects Code: F1
		Time seen: 21:57 dd/mm/yyyy: 29/06/2025	
		Time sent: 8:17 dd/mm/yyyy: 30/06/2025 Title: Video for Ismail Text: We think you'll like this Spotlight video	From suggested creators - Spotlight video Code: A3
		Time sent: 9:49 dd/mm/yyyy: 30/06/2025 Title: [Name of suggested creator] Text: [Description for the video] ExtraL: Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification	From suggested creators - Story Code: C2
		Time seen: 9:49 dd/mm/yyyy: 30/06/2025	

Figure 17: Logbook

Condition 2: Not following, daily opening

Day 1: 15:32 08/07/2025 - 15:31 09/07/2025

Day 2: 15:32 09/07/2025 - 15:31 10/07/2025


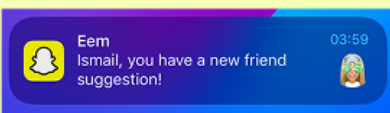

Day 3: 15:32 10/07/2025 - 15:31 11/07/2025

Day 4: 15:32 11/07/2025 - 15:31 12/07/2025

Day 5: 15:32 12/07/2025 - 15:31 13/07/2025

We didn't look at in-app badges yet.

Day 1

Screenshot	Info	Type
15:32, 09/07/2025: Opened the app and scrolled for 5 minutes, occasionally liked videos		
	Time seen: 15:32 dd/mm/yyyy: 08/07/2025	
	Time sent: 3:59 dd/mm/yyyy: 09/07/2025 Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion! Extra: Picture on right instead of left	Friend suggestions Code: E2
	Time seen: 8:17 dd/mm/yyyy: 09/07/2025	

Day 2

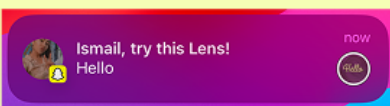

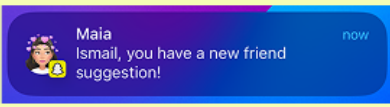

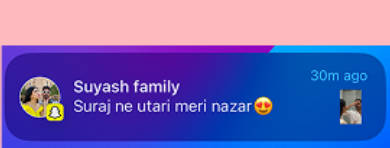

Screenshot	Info	Type
15:53, 09/07/2025: Opened the app and scrolled for 5 minutes, occasionally liked videos		
	Time sent: 16:01 dd/mm/yyyy: 09/07/2025 Title: Ismail, try this Lens! Text: [Name of Lens]	Creative effects Code: F1
	Time seen: 16:07 dd/mm/yyyy: 09/07/2025	
	Time sent: 17:04 dd/mm/yyyy: 09/07/2025 Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion!	Friend suggestions Code: E3
	Time seen: 17:19 dd/mm/yyyy: 09/07/2025	
	Time sent: 18:14 dd/mm/yyyy: 09/07/2025 Title: [Name of suggested creator] Text: [Description for the video] Extra: Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification	From suggested creators - Story Code: C2
	Time seen: 18:44 dd/mm/yyyy: 09/07/2025	

Figure 18: Logbook




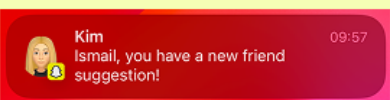
Day 2	Screenshot	Info	Type
		Time sent: 19:20 dd/mm/yyyy: 09/07/2025 Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion!	Friend suggestions Code: E3
		Time seen: 19:20 dd/mm/yyyy: 09/07/2025	
		Time sent: 20:40 dd/mm/yyyy: 09/07/2025 Title: Team Snapchat Text: sent you a Chat	Message reminders Code: G1
		Time seen: 20:40 dd/mm/yyyy: 09/07/2025	
		Time sent: 21:24 dd/mm/yyyy: 09/07/2025 Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion!	Friend suggestions Code: E3
		Time seen: 21:48 dd/mm/yyyy: 09/07/2025	
		Time sent: 22:24 dd/mm/yyyy: 09/07/2025 Title: Video for Ismail Text: We think you'll like this Spotlight video	From suggested creators - Spotlight video Code: A3
		Time sent: 23:24 dd/mm/yyyy: 09/07/2025 Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion!	Friend suggestions Code: E3
		Time sent: 7:48 dd/mm/yyyy: 10/07/2025 Title: [Name of suggested creator] Text: [Description for the video] Extra: Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification	From suggested creators - Story Code: C2
		Time seen: 8:36 dd/mm/yyyy: 10/07/2025	
		Time sent: 9:57 dd/mm/yyyy: 10/07/2025 Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion!	Friend suggestions Code: E3

Figure 19: Logbook

Day 3	Screenshot	Info	Type
		Time seen: 16:57 dd/mm/yyyy: 10/07/2025	
	17:06, 10/07/2025: Opened the app and scrolled for 5 minutes, occasionally liked videos		
		Time seen: 17:12 dd/mm/yyyy: 10/07/2025	
		Time sent: 19:20 dd/mm/yyyy: 10/07/2025 Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: No picture Misleading because it states that you follow a certain creator even though we did not follow anyone.	From suggested creators - Spotlight video Code: A4
		Time seen: 20:21 dd/mm/yyyy: 10/07/2025	
		Time sent: 7:33 dd/mm/yyyy: 11/07/2025 Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: Misleading because it states that you follow a certain creator even though we did not follow anyone.	From suggested creators - Spotlight video Code: A5
		Time seen: 8:07 dd/mm/yyyy: 11/07/2025	
		Time sent: 9:36 dd/mm/yyyy: 11/07/2025 Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: Time sensitive Misleading because it states that you follow a certain creator even though we did not follow anyone. And it's a time sensitive notification even though Spotlight posts are not temporary content	From suggested creators - Spotlight video Code: A6
		Time seen: 10:29 dd/mm/yyyy: 11/07/2025	
		Time sent: 11:34 dd/mm/yyyy: 11/07/2025 Title: Video for Ismail Text: [Description for the video]	From suggested creators - Spotlight video Code: A1
		Time seen: 12:34 dd/mm/yyyy: 11/07/2025	

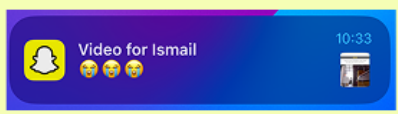
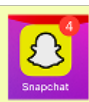
Figure 20: Logbook

Day 3	Screenshot	Info	Type
		Time sent: 13:43 dd/mm/yyyy: 11/07/2025 Title: Ismail, try this Lens! Text: [Name of Lens]	Creative effects Code: F1
		Time seen: 14:44 dd/mm/yyyy: 11/07/2025	
	15:12, 11/07/2025: Opened the app and scrolled for 5 minutes, occasionally liked videos		
Day 4		Time sent: 7:33 dd/mm/yyyy: 12/07/2025 Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: Misleading because it states that you follow a certain creator even though we did not follow anyone.	From suggested creators - Spotlight video Code: A5
		Time seen: 9:33 dd/mm/yyyy: 12/07/2025	
Day 5	Screenshot	Info	Type
		Time sent: 16:40 dd/mm/yyyy: 12/07/2025 Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: Time sensitive Misleading because it states that you follow a certain creator even though we did not follow anyone. And it's a time sensitive notification even though Spotlight posts are not temporary content	From suggested creators - Spotlight video Code: A6
		Time sent: 17:47 dd/mm/yyyy: 12/07/2025 Title: Video for Ismail Text: We think you'll like this Spotlight video	From suggested creators - Spotlight video Code: A3
		Time sent: 18:54 dd/mm/yyyy: 12/07/2025 Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: Time sensitive Misleading because it states that you follow a certain creator even though we did not follow anyone. And it's a time sensitive notification even though Spotlight posts are not temporary content	From suggested creators - Spotlight video Code: A6

Figure 21: Logbook

Day 5	Screenshot	Info	Type
		Time sent: 20:44 dd/mm/yyyy: 12/07/2025 Title: Ismail, try this Lens! Text: [Name of Lens]	Creative effects Code: F1
		Time sent: 21:44 dd/mm/yyyy: 12/07/2025 Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: Time sensitive Misleading because it states that you follow a certain creator even though we did not follow anyone. And it's a time sensitive notification even though Spotlight posts are not temporary content	From suggested creators - Spotlight video Code: A6
		Time sent: 21:44 dd/mm/yyyy: 12/07/2025 Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion!	Friend suggestions Code: E3
		Time sent: 22:44 dd/mm/yyyy: 12/07/2025 Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: Time sensitive Misleading because it states that you follow a certain creator even though we did not follow anyone. And it's a time sensitive notification even though Spotlight posts are not temporary content	From suggested creators - Spotlight video Code: A6
		Time sent: 23:42 dd/mm/yyyy: 12/07/2025 Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: Time sensitive Misleading because it states that you follow a certain creator even though we did not follow anyone. And it's a time sensitive notification even though Spotlight posts are not temporary content	From suggested creators - Spotlight video Code: A6
23:39, 12/07/2025: Opened the app and scrolled for 5 minutes, occasionally liked videos			
		Time seen: 23:44 dd/mm/yyyy: 12/07/2025	
		Time sent: 7:44 dd/mm/yyyy: 13/07/2025 Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: Misleading because it states that you follow a certain creator even though we did not follow anyone.	From suggested creators - Spotlight video Code: A5
		Time seen: 8:45 dd/mm/yyyy: 13/07/2025	

Figure 22: Logbook

Day 5	Screenshot	Info	Type
		Time sent: 10:33 dd/mm/yyyy: 13/07/2025 Title: Video for Ismail Text: [Description for the video] Extra: No picture	From suggested creators - Spotlight video Code: A2
		Time seen: 15:16 dd/mm/yyyy: 13/07/2025	
	15:30, 13/07/2025: Opened the app and scrolled for 5 minutes, occasionally liked videos		

Condition 3: Not following, opening 4x a day

Day 1: 8:00 14/07/2025 - 7:59 15/07/2025
Day 2: 8:00 15/07/2025 - 7:59 16/07/2025
Day 3: 8:00 16/07/2025 - 7:59 17/07/2025
Day 4: 8:00 17/07/2025 - 7:59 18/07/2025
Day 5: 8:00 18/07/2025 - 7:59 19/07/2025

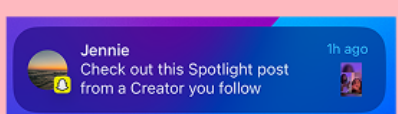

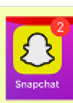
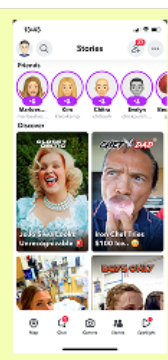

Day 1	Screenshot	Info	Type
		Time sent: 8:07 dd/mm/yyyy: 14/07/2025 Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: Misleading because it states that you follow a certain creator even though we did not follow anyone.	From suggested creators - Spotlight video Code: A5
		Time seen: 8:17 dd/mm/yyyy: 14/07/2025	
	9:16, 14/07/2025: Opened the app and scrolled for 5 minutes, occasionally liked videos		
		Time seen: 9:23 dd/mm/yyyy: 14/07/2025	
	13:43, 14/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 13:43 dd/mm/yyyy: 14/07/2025 Badges on: Chat Friend suggestions Spotlight	
		Time seen: 13:47 dd/mm/yyyy: 14/07/2025	

Figure 23: Logbook


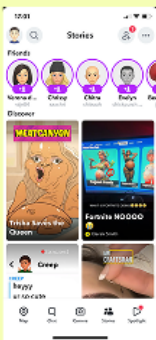

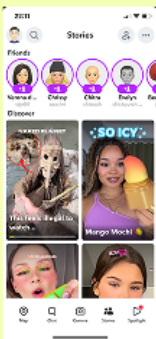

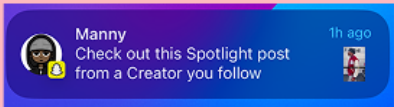
Day 1	Screenshot	Info	Type
		Time seen: 15:39 dd/mm/yyyy: 14/07/2025	
	17:01, 14/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 17:01 dd/mm/yyyy: 14/07/2025 Badges on: Friend suggestions Spotlight	
		Time seen: 17:06 dd/mm/yyyy: 14/07/2025	
	22:11, 14/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 22:11 dd/mm/yyyy: 14/07/2025 Badges on: Spotlight	
		Time seen: 22:18 dd/mm/yyyy: 14/07/2025	
		Time sent: 7:16 dd/mm/yyyy: 15/07/2025 Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: Misleading because it states that you follow a certain creator even though we did not follow anyone.	From suggested creators - Spotlight video Code: A5

Figure 24: Logbook

Day 2	Screenshot	Info	Type
		Time seen: 8:17 dd/mm/yyyy: 15/07/2025	
	8:30, 15/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 8:30 dd/mm/yyyy: 15/07/2025 Badges on: Spotlight	
		Time seen: 8:36 dd/mm/yyyy: 15/07/2025	
		Time sent: 9:50 dd/mm/yyyy: 15/07/2025 Title: Video for Ismail Text: [Description for the video]	From suggested creators - Spotlight video? Code: A1
		Time sent: 10:42 dd/mm/yyyy: 15/07/2025 Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: Time sensitive Misleading because it states that you follow a certain creator even though we did not follow anyone. And it's a time sensitive notification even though Spotlight posts are not temporary content	From suggested creators - Spotlight video Code: A6
		Time seen: 10:50 dd/mm/yyyy: 15/07/2025	
		Time sent: 11:49 dd/mm/yyyy: 15/07/2025 Title: [Name of suggested creator] Text: Check out this Spotlight post from a Creator you follow Extra: Time sensitive Misleading because it states that you follow a certain creator even though we did not follow anyone. And it's a time sensitive notification even though Spotlight posts are not temporary content	From suggested creators - Spotlight video Code: A6
		Time seen: 12:11 dd/mm/yyyy: 15/07/2025	

Figure 25: Logbook

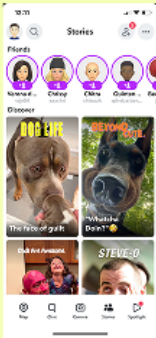

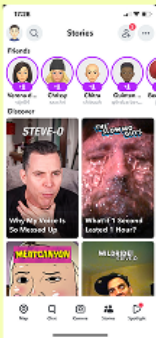
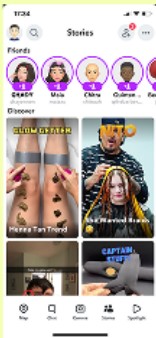

Day 2	Screenshot	Info	Type
	12:11, 15/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		<p>Time: 12:12 dd/mm/yyyy: 15/07/2025</p> <p>Badges on: Friend suggestions Spotlight</p>	
		<p>Time seen: 12:18 dd/mm/yyyy: 15/07/2025</p>	
	17:26, 15/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		<p>Time: 17:26 dd/mm/yyyy: 15/07/2025</p> <p>Badges on: Friend suggestions Spotlight</p>	
		<p>Time: 17:34 dd/mm/yyyy: 15/07/2025</p> <p>Badges on: Friend suggestions</p>	
		<p>Time seen: 17:34 dd/mm/yyyy: 15/07/2025</p>	
	21:57, 15/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		

Figure 26: Logbook


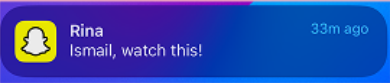
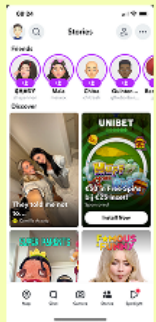
Day 2	Screenshot	Info	Type
		Time: 21:57 dd/mm/yyyy: 15/07/2025 Badges on: Friend suggestions Spotlight	
		Time seen: 22:04 dd/mm/yyyy: 15/07/2025	
		Time sent: 7:07 dd/mm/yyyy: 16/07/2025 Title: [Name of suggested creator] Text: Ismail, watch this! Extra: No picture Misleading because it looks like a message from the creator, telling them to watch something. But it's actually Snapchat that generates this.	From suggested creators - Spotlight video Code: A7
		Time seen: 8:23 dd/mm/yyyy: 16/07/2025	
Day 3	Screenshot	Info	Type
	8:24, 16/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 8:24 dd/mm/yyyy: 16/07/2025 Badges on: Spotlight	
		Time sent: 9:19 dd/mm/yyyy: 16/07/2025 Title: Video for Ismail Text: [Description for the video]	From suggested creators - Spotlight video? Code: A1

Figure 27: Logbook



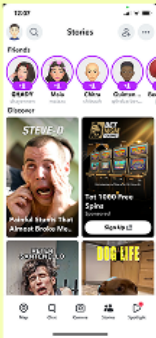

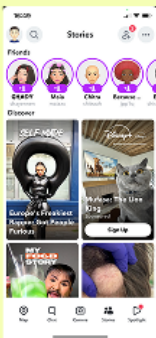

Day 3	Screenshot	Info	Type
		Time sent: 11:19 dd/mm/yyyy: 16/07/2025 Title: [Name of suggested creator] Text: Ismail, watch this! Extra: Time sensitive Misleading because it looks like a message from the creator, telling them to watch something. But it's actually Snapchat that generates this. And it's a time sensitive notification even though Spotlight posts are not temporary content	From suggested creators - Spotlight video Code: A8
		Time seen: 11:59 dd/mm/yyyy: 16/07/2025	
12:07, 16/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos			
		Time: 12:07 dd/mm/yyyy: 16/07/2025 Badges on: Spotlight	
		Time seen: 11:59 dd/mm/yyyy: 16/07/2025	
16:49, 16/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos			
		Time: 16:49 dd/mm/yyyy: 16/07/2025 Badges on: Friend suggestions Spotlight	
		Time seen: 16:55 dd/mm/yyyy: 16/07/2025	
22:11, 16/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos			

Figure 28: Logbook

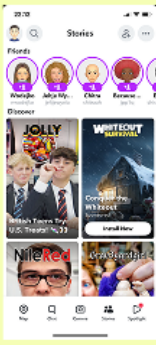

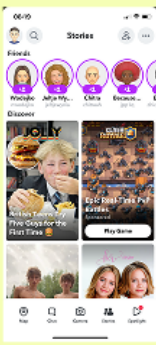

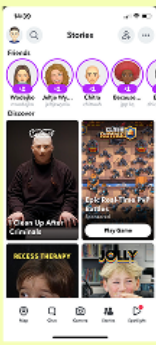

Day 3	Screenshot	Info	Type
		Time: 22:12 dd/mm/yyyy: 16/07/2025 Badges on: Friend suggestions Spotlight	
		Time seen: 22:18 dd/mm/yyyy: 16/07/2025	
Day 4	Screenshot	Info	Type
	8:19, 17/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 8:19 dd/mm/yyyy: 17/07/2025 Badges on: Spotlight	
		Time seen: 8:25 dd/mm/yyyy: 17/07/2025	
	14:39, 17/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 14:39 dd/mm/yyyy: 17/07/2025 Badges on: Spotlight	
		Time seen: 14:45 dd/mm/yyyy: 17/07/2025	
	19:20, 17/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		

Figure 29: Logbook

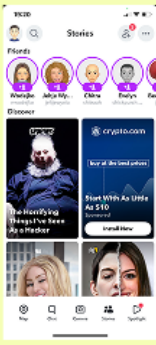

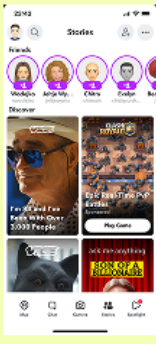

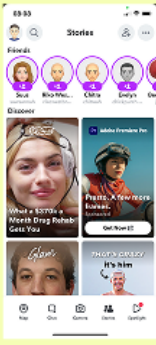

Day 4	Screenshot	Info	Type
		Time: 19:20 dd/mm/yyyy: 17/07/2025	
		Time seen: 19:27 dd/mm/yyyy: 17/07/2025	
	23:43, 17/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
Day 5		Time: 23:43 dd/mm/yyyy: 17/07/2025	
		Time seen: 23:49 dd/mm/yyyy: 17/07/2025	
	8:08, 18/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 8:08 dd/mm/yyyy: 18/07/2025	
Day 5		Time seen: 8:08 dd/mm/yyyy: 18/07/2025	
	14:57, 18/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		

Figure 30: Logbook

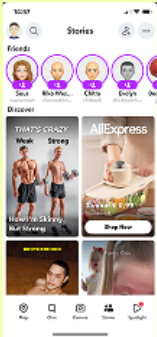
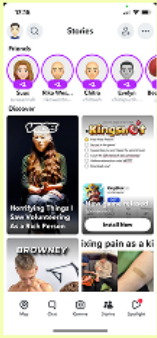


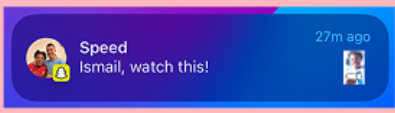
Day 5	Screenshot	Info	Type
	14:57, 18/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 14:57 dd/mm/yyyy: 17/07/2025 Badges on: Spotlight	
	17:15, 18/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 17:15 dd/mm/yyyy: 17/07/2025 Badges on: Spotlight	
Day 1	01:01, 19/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time seen: 01:01 dd/mm/yyyy: 19/07/2025	
Condition 4: Following, not opening			
Day 1: 10:30 19/07/2025 - 10:29 20/07/2025 Day 2: 10:30 20/07/2025 - 10:29 21/07/2025 Day 3: 10:30 21/07/2025 - 10:29 22/07/2025 Day 4: 10:30 22/07/2025 - 10:29 23/07/2025 Day 5: 10:30 23/07/2025 - 10:29 24/07/2025			
Day 1	Screenshot	Info	Type
		Time seen: 14:00 dd/mm/yyyy: 19/07/2025	
		Time sent: 16:00 dd/mm/yyyy: 19/07/2025 Title: [Name of followed creator] Text: Ismail, watch this! Extra: Misleading because it looks like a message from the creator, telling them to watch something. But it's actually Snapchat that generates this.	From followed creators - Spotlight video Code: B1

Figure 31: Logbook

Day 1	Screenshot	Info	Type
		Time seen: 16:28 dd/mm/yyyy: 19/07/2025	
		Time sent: 17:10 dd/mm/yyyy: 19/07/2025 Title: [Name of followed creator] Text: Added to their Story	From followed creators - Story Code: D1
		Time seen: 17:42 dd/mm/yyyy: 19/07/2025	
Day 2	Screenshot	Info	Type
		Time sent: 16:00 dd/mm/yyyy: 20/07/2025 Title: Spotlight post by [name of followed creator] Text: [Description for the video] Extra: Time sensitive Misleading because it's a time sensitive notification even though Spotlight posts are not temporary content	From followed creators - Spotlight video Code: B2
		Time seen: 16:13 dd/mm/yyyy: 20/07/2025	
		Time sent: 16:22 dd/mm/yyyy: 20/07/2025 Title: [Name of followed creator] Text: [Description for the video] Extra: Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification	From followed creators - Story Code: D2
		Time seen: 17:42 dd/mm/yyyy: 20/07/2025	
Day 3	Screenshot	Info	Type
		Time sent: 15:41 dd/mm/yyyy: 21/07/2025 Title: [Name of followed creator] Text: Ismail, watch this! Extra: Time sensitive Misleading because it looks like a message from the creator, telling them to watch something. But it's actually Snapchat that generates this. And it's a time sensitive notification even though Spotlight posts are not temporary content	From followed creators - Spotlight video Code: B3

Figure 32: Logbook

Day 3	Screenshot	Info	Type
		Time seen: 16:13 dd/mm/yyyy: 21/07/2025	
		Time sent: 16:43 dd/mm/yyyy: 21/07/2025 Title: [Name of followed creator] Text: Ismail, watch this! Extra: Time sensitive Misleading because it looks like a message from the creator, telling them to watch something. But it's actually Snapchat that generates this. And it's a time sensitive notification even though Spotlight posts are not temporary content	From followed creators - Spotlight video Code: B3
		Time seen: 17:07 dd/mm/yyyy: 21/07/2025	
		Time sent: 17:53 dd/mm/yyyy: 21/07/2025 Title: [Name of followed creator] Text: added to their Story Extra: Time sensitive	From followed creators - Story Code: D3
		Time seen: 18:02 dd/mm/yyyy: 21/07/2025	
		Time sent: 18:55 dd/mm/yyyy: 21/07/2025 Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion!	Friend suggestions Code: E3
		Time seen: 19:51 dd/mm/yyyy: 21/07/2025	
		Time sent: 20:03 dd/mm/yyyy: 21/07/2025 Title: [Name of followed creator] Text: Ismail, watch this! Extra: Time sensitive Misleading because it looks like a message from the creator, telling them to watch something. But it's actually Snapchat that generates this. And it's a time sensitive notification even though Spotlight posts are not temporary content	From followed creators - Spotlight video Code: B3
		Time seen: 20:05 dd/mm/yyyy: 21/07/2025	
		Time sent: 21:05 dd/mm/yyyy: 21/07/2025 Title: [Name of followed creator] Text: added to their Story Extra: Time sensitive No picture	From followed creators - Story Code: D4

Figure 33: Logbook

Day 3	Screenshot	Info	Type
		Time seen: 21:46 dd/mm/yyyy: 21/07/2025	
		Time sent: 22:05 dd/mm/yyyy: 21/07/2025 Title: [Name of suggested friend] Text: Ismail, you have a new friend suggestion!	Friend suggestions Code: E3
		Time seen: 22:05 dd/mm/yyyy: 21/07/2025	
		Time sent: 23:13 dd/mm/yyyy: 21/07/2025 Title: [Name of followed creator] Text: [Description for the video] Extra: Time sensitive Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification	From followed creators - Story Code: D5
		Time seen: 23:39 dd/mm/yyyy: 21/07/2025	
		Time sent: 7:16 dd/mm/yyyy: 22/07/2025 Title: Video for Ismail Text: We think you'll like this Spotlight video	From suggested creators - Spotlight video Code: A3
		Time seen: 8:06 dd/mm/yyyy: 23/07/2025	
		Time sent: 10:07 dd/mm/yyyy: 22/07/2025 Title: [Name of followed creator] Text: [Description for the video] Extra: Time sensitive Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification	From followed creators - Story Code: D5
Day 4	Screenshot	Info	Type
		Time seen: 12:07 dd/mm/yyyy: 22/07/2025	
		Time seen: 6:20 dd/mm/yyyy: 23/07/2025	
		Time seen: 9:25 dd/mm/yyyy: 23/07/2025	

Figure 34: Logbook

Day 4	Screenshot	Info	Type
		Time sent: 8:45 dd/mm/yyyy: 23/07/2025 Title: [Name of followed creator] Text: [Description for the video] Extra: Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification	From followed creators - Story Code: D2
Day 5	Screenshot	Info	Type
		Time sent: 15:58 dd/mm/yyyy: 23/07/2025 Title: [Name of followed creator] Text: added to their Story Extra: Time sensitive	From followed creators - Story Code: D3
		Time sent: 16:58 dd/mm/yyyy: 23/07/2025 Title: Video for Ismail Text: We think you'll like this Spotlight video	From suggested creators - Spotlight video Code: A3
		Time sent: 17:35 dd/mm/yyyy: 23/07/2025 Title: [Name of followed creator] Text: [Description for the video] Extra: Time sensitive Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification	From followed creators - Story Code: D5
		Time seen: 9:25 dd/mm/yyyy: 23/07/2025	
		Time sent: 19:08 dd/mm/yyyy: 23/07/2025 Title: Ismail, try this Lens! Text: [Name of Lens]	Creative effects Code: F1
		Time sent: 20:08 dd/mm/yyyy: 23/07/2025 Title: [Name of followed creator] Text: [Description for the video] Extra: Time sensitive Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification	From followed creators - Story Code: D5
		Time sent: 20:55 dd/mm/yyyy: 23/07/2025 Title: [Name of suggested creator] Text: [Description for the video] Extra: Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification	From suggested creators - Story Code: C2

Figure 35: Logbook


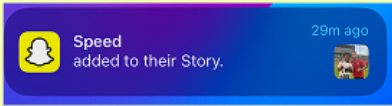

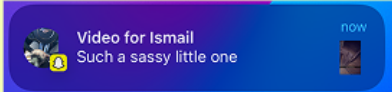

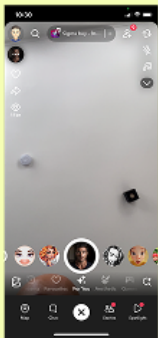

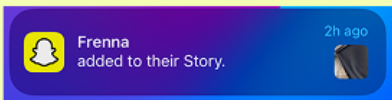
Day 5	Screenshot	Info	Type
		Time seen: 21:09 dd/mm/yyyy: 23/07/2025	
		Time sent: 7:10 dd/mm/yyyy: 24/07/2025 Title: [Name of followed creator] Text: added to their Story Extra: No picture	From followed creators - Story Code: D6
		Time seen: 7:40 dd/mm/yyyy: 24/07/2025	
Condition 5: Following, daily opening			
Day 1: 9:20 24/07/2025 - 9:19 25/07/2025 Day 2: 9:20 25/07/2025 - 9:19 26/07/2025 Day 3: 9:20 26/07/2025 - 9:19 27/07/2025 Day 4: 9:20 27/07/2025 - 9:19 28/07/2025 Day 5: 9:20 28/07/2025 - 9:19 29/07/2025			
Day 1	Screenshot	Info	Type
		Time sent: 9:21 dd/mm/yyyy: 24/07/2025 Title: Video for Ismail Text: [Description for the video]	From suggested creators - Spotlight video Code: A1
		Time seen: 9:21 dd/mm/yyyy: 24/07/2025	
	10:30, 24/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 10:30 dd/mm/yyyy: 24-07-2025 Badges on: Friend suggestions Stories Spotlight	
		Time seen: 10:37 dd/mm/yyyy: 24/07/2025	
		Time sent: 8:08 dd/mm/yyyy: 25/07/2025 Title: [Name of followed creator] Text: added to their Story Extra: No picture	From followed creators - Story Code: D6

Figure 36: Logbook



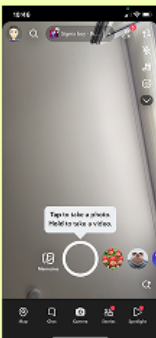



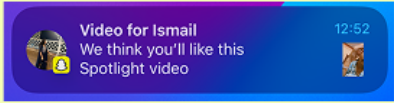

Day 2	Screenshot	Info	Type
		Time sent: 9:37 dd/mm/yyyy: 25/07/2025 Title: Ismail, try this Lens! Text: [Name of Lens]	Creative effects Code: F1
		Time seen: 10:08 dd/mm/yyyy: 25/07/2025	
	10:46, 25/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 10:46 dd/mm/yyyy: 25/07/2025 Badges on: Friend suggestions Stories Spotlight	
		Time sent: 15:50 dd/mm/yyyy: 25/07/2025 Title: [Name of followed creator] Text: Ismail, watch this! Extra: Misleading because it looks like a message from the creator, telling them to watch something. But it's actually Snapchat that generates this.	From followed creators - Spotlight video Code: B1
		Time seen: 15:51 dd/mm/yyyy: 25/07/2025	
		Time sent: 7:56 dd/mm/yyyy: 26/07/2025 Title: [Name of followed creator] Text: [Description for the video] Extra: Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification	From followed creators - Story Code: D2
Day 3	Screenshot	Info	Type
		Time sent: 9:56 dd/mm/yyyy: 26/07/2025 Title: Video for Ismail Text: We think you'll like this Spotlight video	From suggested creators - Spotlight video Code: A3
		Time seen: 10:56 dd/mm/yyyy: 26/07/2025	

Figure 37: Logbook

Day 3	Screenshot	Info	Type
	10:58, 26/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		<p>Time: 10:58 dd/mm/yyyy: 26/07/2025</p> <p>Badges on: Friend suggestions Spotlight</p>	
Day 4		<p>Time sent: 8:12 dd/mm/yyyy: 27/07/2025</p> <p>Title: [Name of followed creator] Text: [Description for the video] Extra: No picture Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification</p>	<p>From followed creators - Story</p> <p>Code: D7</p>
		<p>Time seen: 9:12 dd/mm/yyyy: 27/07/2025</p>	
Day 4	Screenshot	Info	Type
		<p>Time sent: 10:43 dd/mm/yyyy: 27/07/2025</p> <p>Title: Video for Ismail Text: [Description for the video]</p>	<p>From suggested creators - Spotlight video</p> <p>Code: A1</p>
		<p>Time seen: 10:44 dd/mm/yyyy: 27/07/2025</p>	
Day 4	10:44, 27/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		<p>Time: 10:44 dd/mm/yyyy: 27/07/2025</p> <p>Badges on: Stories Spotlight</p>	
		<p>Time sent: 7:37 dd/mm/yyyy: 28/07/2025</p> <p>Title: [Name of followed creator] Text: Added to their Story</p>	<p>From followed creators - Story</p> <p>Code: D1</p>

Figure 38: Logbook



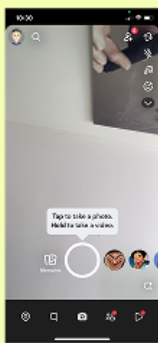
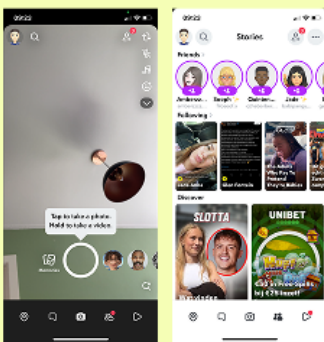
Day 4	Screenshot	Info	Type
		Time seen: 8:37 dd/mm/yyyy: 28/07/2025	
Day 5	Screenshot	Info	Type
		Time seen: 9:31 dd/mm/yyyy: 28/07/2025	
10:30, 28/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos			
Day 1	Screenshot	Info	Type
		Time: 10:44 dd/mm/yyyy: 27/07/2025	
Badges on: Friend suggestions Stories Spotlight			
Condition 6: Following, opening 4x a day			
Day 1: 9:20 29/07/2025 - 9:19 30/07/2025 Day 2: 9:20 30/07/2025 - 9:19 31/07/2025 Day 3: 9:20 31/07/2025 - 9:19 01/08/2025 Day 4: 9:20 01/08/2025 - 9:19 02/08/2025 Day 5: 9:20 02/08/2025 - 9:19 03/08/2025			
Day 1	Screenshot	Info	Type
		Time: 9:23 dd/mm/yyyy: 29-07-2025	
Badges on: Friend suggestions Stories Spotlight			

Figure 39: Logbook

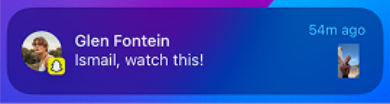

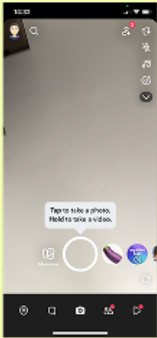


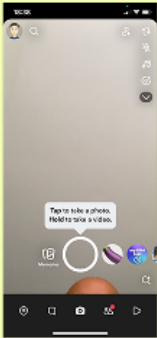
Day 1	Screenshot	Info	Type
		Time sent: 13:37 dd/mm/yyyy: 29/07/2025 Title: [Name of followed creator] Text: Ismail, watch this! Extra: Misleading because it looks like a message from the creator, telling them to watch something. But it's actually Snapchat that generates this.	From followed creators - Spotlight video Code: B1
14:31, 29/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos			
		Time seen: 14:31 dd/mm/yyyy: 29/07/2025	
		Time: 14:32 dd/mm/yyyy: 29-07-2025 Badges on: Friend suggestions Stories Spotlight	
		Time sent: 14:42 dd/mm/yyyy: 29/07/2025 Title: [Name of followed creator] Text: [Description for the video] Extra: Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification	From followed creators - Story Code: D2
		Time seen: 14:42 dd/mm/yyyy: 29/07/2025	
18:38, 29/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos			
		Time: 18:38 dd/mm/yyyy: 29-07-2025 Badges on: Stories	
22:31, 29/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos			

Figure 40: Logbook

Day 1	Screenshot	Info	Type
		Time: 22:31 dd/mm/yyyy: 29-07-2025	
		Badges on: Stories	
7:08, 30/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos			
Day 2	Screenshot	Info	Type
		Time: 22:31 dd/mm/yyyy: 29-07-2025	
		Badges on: Stories Spotlight	
Day 2	Screenshot	Info	Type
		Time sent: 12:55 dd/mm/yyyy: 30/07/2025 Title: Team Snapchat Text: sent you a Chat	Message reminders Code: G1
13:55, 30/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos			
Day 2	Screenshot	Info	Type
		Time: 13:55 dd/mm/yyyy: 30/07/2025	
		Badges on: Chat Stories Spotlight	

Figure 41: Logbook

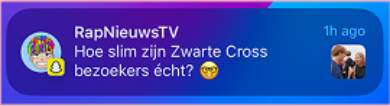

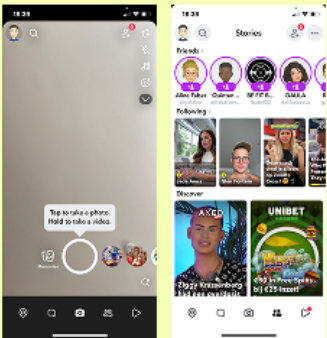
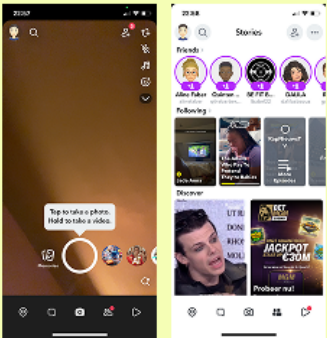

Day 2	Screenshot	Info	Type
		Time sent: 17:05 dd/mm/yyyy: 30/07/2025 Title: [Name of followed creator] Text: [Description for the video] Extra: Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification	From followed creators - Story Code: D2
		Time seen: 18:05 dd/mm/yyyy: 30/07/2025	
18:39, 30/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos			
		Time: 18:39 dd/mm/yyyy: 30/07/2025 Badges on: Friend suggestions Spotlight	
22:57, 30/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos			
		Time: 22:57 dd/mm/yyyy: 30/07/2025 Badges on: Friend suggestions Stories Spotlight	
		Time seen: 7:43 dd/mm/yyyy: 31/07/2025	
7:43, 31/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos			

Figure 42: Logbook

Day 2	Screenshot	Info	Type
		Time: 7:43 dd/mm/yyyy: 31/07/2025	
		Badges on: Stories Spotlight	
Day 3	Screenshot	Info	Type
		Time sent: 13:00 dd/mm/yyyy: 31/07/2025 Title: [Name of followed creator] Text: added to their Story Extra: Time sensitive	From followed creators - Story Code: D3
		Time seen: 13:39 dd/mm/yyyy: 31/07/2025	
	13:55, 30/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 13:39 dd/mm/yyyy: 31/07/2025	
		Badges on: Stories Spotlight	
		Time seen: 18:39 dd/mm/yyyy: 31/07/2025	
	18:39, 30/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 18:39 dd/mm/yyyy: 31/07/2025	
		Badges on: Stories Spotlight	

Figure 43: Logbook


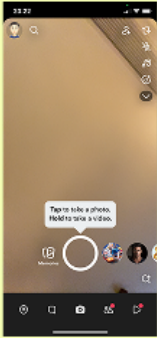

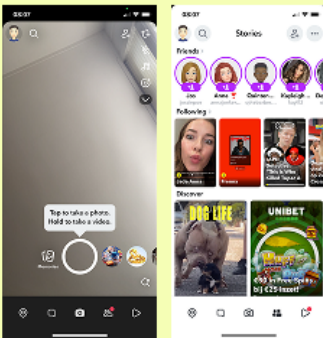
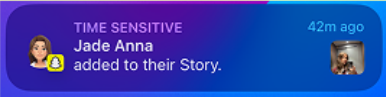

Day 3	Screenshot	Info	Type
		Time seen: 23:21 dd/mm/yyyy: 31/07/2025	
	23:21, 30/07/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 23:22 dd/mm/yyyy: 31/07/2025 Badges on: Stories Spotlight	
Day 4		Time seen: 08:07 dd/mm/yyyy: 01/08/2025	
	08:07, 01/08/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 08:07 dd/mm/yyyy: 01/08/2025 Badges on: Stories Spotlight	
	Screenshot	Info	Type
		Time sent: 13:06 dd/mm/yyyy: 01/08/2025 Title: [Name of followed creator] Text: added to their Story Extra: Time sensitive	From followed creators - Story Code: D3
		Time seen: 13:48 dd/mm/yyyy: 01/08/2025	
	14:16, 01/08/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		

Figure 44: Logbook

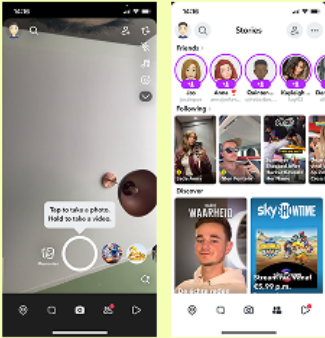

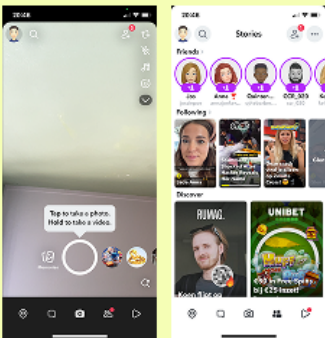

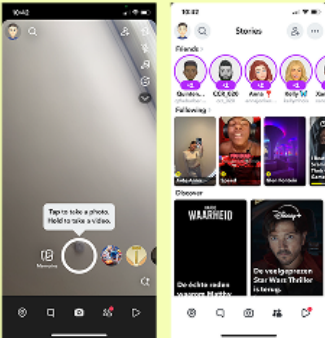

Day 4	Screenshot	Info	Type
		Time: 14:16 dd/mm/yyyy: 01/08/2025	
		Badges on: Stories Spotlight	
	20:46, 01/08/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
Day 5	Screenshot	Info	Type
		Time: 20:46 dd/mm/yyyy: 01/08/2025	
		Badges on: Friend suggestions Stories Spotlight	
	10:42, 02/08/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
Day 5	Screenshot	Info	Type
		Time: 10:42 dd/mm/yyyy: 02/08/2025	
		Badges on: Stories Spotlight	

Figure 45: Logbook

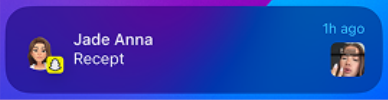

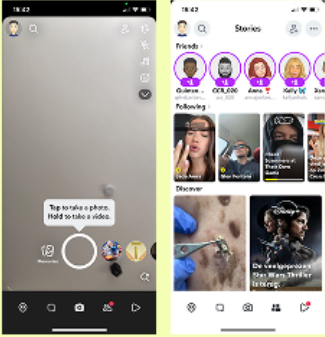

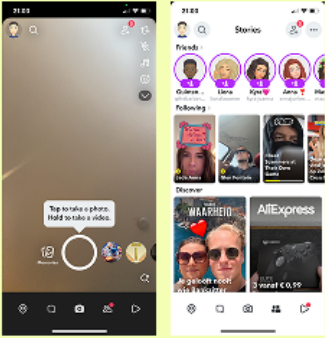

Day 5	Screenshot	Info	Type
		Time sent: 14:41 dd/mm/yyyy: 02/08/2025 Title: [Name of followed creator] Text: [Description for the video] Extra: Misleading because it looks like a personal message from the creator, but it's actually a public post they made for which Snapchat generates a notification	From followed creators - Story Code: D2
		Time seen: 15:41 dd/mm/yyyy: 02/08/2025	
	15:41, 02/08/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 15:42 dd/mm/yyyy: 02/08/2025 Badges on: Stories Spotlight	
		Time seen: 21:03 dd/mm/yyyy: 02/08/2025	
	21:03, 02/08/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		
		Time: 21:03 dd/mm/yyyy: 02/08/2025 Badges on: Friend suggestions Stories Spotlight	
		Time seen: 23:48 dd/mm/yyyy: 02/08/2025	
	23:48, 02/08/2025: Opened the app, clicked on all the red badges to make them disappear, scrolled for 5 minutes, and occasionally liked videos		

Figure 46: Logbook

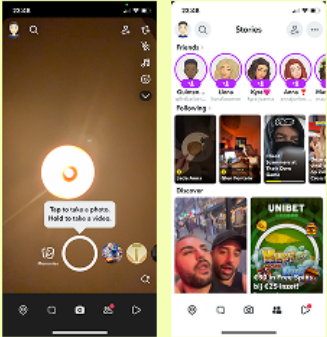
Day 5	Screenshot	Info	Type
		<p>Time: 23:48 dd/mm/yyyy: 02/08/2025</p> <p>Badges on: Stories Spotlight</p>	

Figure 47: Logbook

4. QUALITATIVE STUDY: SELECTION CRITERIA

4.1 1. SUMMARY

Type of research: N=13 Single interviews of 50 minutes

Period: 21 August to 4 September

Location: Amsterdam

Target group: Snapchat users and non-Snapchat users, including young people.

Incentive: €50

4.2 2. DATES, TIMES, LOCATION

4.2.1 DATES & TIMES

N=13 single interviews of 50 minutes

These can be scheduled on the dates below between 2 pm and 8 pm (preferably spread across these days and within office hours)

N=9 Snapchat users on:		N=4 non-Snapchat users on:	
Thursday August 21			
Monday August 25		Tuesday September 2	
Tuesday August 26		Wednesday September 3	
Wednesday August 27		Thursday September 4	

4.2.2 LOCATION

Prinseneiland 97HS

1013 LN Amsterdam

The Netherlands

Parking: Very limited parking is available, so we recommend travelling by public transport or bicycle.

4.3 3. SELECTION CRITERIA

IMPORTANT:

Do not share with participants that this is a study about Snapchat!!

Therefore present only general questions about the platforms they use and the extent to which they use them.

4.3.1 GENERAL

Within both groups:

- Gender distribution
- Distribution in terms of educational level
- Have not previously participated in a study concerning Snapchat in the past year.

4.3.2 AGE DISTRIBUTION

	N=9 Snapchat users	N=4 non-Snapchat users
15-19	N=5	N=0
20-27	N=3	N=1
28-43	N=1	N=1
44-60	N=0	N=2

4.3.3 SNAPCHAT USERS

- N=9
- Use Snapchat daily
- Use Snapchat to exchange messages/snaps with friends (at least twice a week)
- Use the Spotlight page, where you can scroll endlessly through recommended videos (at least once a week)
- Post Stories themselves (public or only for friends, at least once a month)
- Sometimes share their location on the Snap Map (at least once a month)

4.3.4 NON-SNAPCHAT USERS

- N=4
- They have not used Snapchat for at least ten years and do not have the app on their phone.
- They use at least two social media platforms from this list: Facebook, Instagram, X (Twitter), Threads, TikTok, YouTube, Bluesky, Mastodon, Pixelfed.
- They open the two social media platforms from this list that they use most frequently on a daily basis.

4.4 4. CONSENRT

Participants must agree to the following:

- Voice recording equipment is present. The recordings are for internal use only, will not be published and will not be linked to their personal data. We delete recordings after three months.

- Before the interview, we ask participants to sign a consent form for the processing of their data. We store only the data provided by the selection agency (based on this screening) and delete it three months after the interviews. This data will never be published or linked to the research findings. This means that research findings can never be traced back to the individual.

4.5 5. RECRUITMENT TEXT

We are conducting a study into social media platforms and how they keep their users informed. We want to know how users currently experience this and what their needs are in this regard. We show them a number of screenshots. This will enable us to add the users' perspective to our policy recommendations for social media platforms.

5. QUALITATIVE STUDY: INTERVIEW GUIDE

5.1 1. INTRODUCTION

5 min

- Purpose of the interview
- There are no right or wrong answers
- Voice recording
- Findings are anonymized
- Introductions of moderator and participant

5.2 2. GENERAL APP USAGE

10 min

- How much do people use their phones? Screen time?
- What do people use their phones for?
- Which apps do people use often?
- What are their favorite apps? Why?
- What are their favorite social media platforms? Why?
- What is the purpose of using these social media platforms?
- What do they like about social media platforms? And what do they like less?
- What do people think about their own smartphone usage?
 - Would they like to use it more or less?
 - Are they consciously trying to use it less? If so, how?
 - Do people have any idea which apps cause them to spend a lot of time on their phones? What role do social media platforms play in this?
 - If so, how do they think these apps do that?

Snapchat:

- Why do people use Snapchat and for what purpose?
- What are their favorite Snapchat features? Why?
- Which features do people never or almost never use? Why?
- How do people experience using Snapchat?
 - What do people experience as positive and what as negative?

5.3 3. NOTIFICATIONS

10 min

Open:

- What do people think about receiving notifications on their smartphones?
What advantages and disadvantages do they see?

- How have people set up notifications on their phones? Can they tell us more about this?
 - Do people use certain modes to avoid being disturbed by notifications? (e.g., do not disturb)
 - Do people sometimes turn off notifications? When, for which apps, and why?
 - Have people set up scheduled notifications? For which apps and why?
- Do they always check their phone when it vibrates or makes a sound? And do they always click on the notifications they receive? Which ones, and which ones not? When, and when not?
- Which apps do people feel they receive too many notifications from? None is also an answer.
- Do people ever feel that a notification distracts them? Example?
- Does it ever happen that a notification turns out to be about something other than what they thought when they clicked on it? Example?

Snapchat

- What do people think of the notifications they receive on Snapchat? How does this compare to notifications from other apps?
- How have you set up notifications on Snapchat itself? What is turned on and what is turned off, and why?
- Which notifications do people like to receive? And on Snapchat? Why?
 - What goes through your mind when you receive such a notification?
 - Which notifications are important/interesting? Why?
 - When does a notification prompt you to 'open' it and when does it not?
- Which notifications are less welcome? And on Snapchat? Why?
 - What goes through people's minds when they receive such a notification?
- What do people think of the red dots that appear in apps?
 - In which apps do people feel that this happens often?
 - How do people deal with this and why do they do so?
 - What do people think about the frequency with which they appear?
 - How often are the red dots relevant/interesting? And how often are they distracting, irritating or uninteresting?

5.4 4. SCREENSHOTS NOTIFICATIONS

20 min

We will now show you a number of screenshots of notifications. For each screenshot, we will ask a few questions and ask you to fill in a number of scales:

Per screenshot

- To what extent would you be inclined to click on this if you received this notification? Why?
- To what extent does this notification seem interesting? Why?

- What do you think this notification means?
- Who is the sender? Snapchat, someone you know, someone you don't know?
- Is this a private message (only you can see it) or is it a public post?
- What will happen if people click on the notification?
- We demonstrate what happens
- To what extent did what you expected happen? Why?
- To what extent do you find the notification interesting now? Why?
- Do they you to receive this notification?

In conclusion:

- What do you think of the notifications you have seen? Any special comments?
- Do they differ in any way from notifications on other social media platforms?
- Do you recognize these notifications from your own use?
- Do you receive these notifications often, or do you receive other notifications more often? Which ones?

5.5 5. CONCLUSION

5 min

- To what extent do people think there should be rules for platforms such as Snapchat with regard to notifications or red badges?
 - Why or why not?
 - If yes: what kind of rules would you come up with?
- What advice would you give Snapchat regarding notifications?
- Is there any other advice you would like to give Snapchat?
- Thank you & Goodbye

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