

**SIS**

IRB Study # 2009752683

INDIANA UNIVERSITY STUDY INFORMATION SHEET for Preferences regarding Smartphone Notifications

About this research

You are being asked to participate in a research study. Scientists do research to answer important questions which might help change or improve the way we do things in the future.

This form will give you information about the study to help you decide whether you want to participate. Please read this form, and ask any questions you have, before agreeing to be in the study.

Taking part in this study is voluntary.

You may choose not to take part or may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which you are entitled. Your decision whether or not to participate in this study will not affect your current or future relations with Indiana University, Bloomington.

This research is intended for individuals 18 years of age or older. If

you are under age 18, do not complete the study.

Why is this study being done?

The purpose of this study is to investigate people's experiences with notifications they receive on their smartphones. You were selected as a possible participant because you accepted our invitation to participate in the study. The study is being conducted by research scholar Priyanka Verma and Prof. Sameer Patil from Indiana University Bloomington.

What will happen during the study?

This study consists of a questionnaire to be completed online. Completing the questionnaire takes about 10–15 minutes.

What are the risks and benefits of taking part in this study?

The risks of participating in this research are minimal. However, you may experience a small amount of stress or discomfort while contemplating your responses. Your responses are confidential and will be accessed only by our research team. We will not ask for personally identifying information.

We do not expect you to benefit directly from taking part in this study, but we hope to derive insight that will help improve the user experience of smartphone notifications.

How will my information be protected?

All research includes at least a small risk of loss of confidentiality. Efforts will be made to keep your personal information

confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your identity will be held in confidence in reports in which the study may be published. The information will be stored securely on encrypted hard drives during analysis and then moved to the Scholarly Data Archive at IU. The data will be accessible only to those conducting this study.

Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and his/her research associates, the Indiana University Institutional Review Board or its designees, and any state or federal agencies who may need to access your research records (as allowed by law).

Will I be paid for participation?

For your participation, you will be paid \$1.80 via Amazon Mechanical Turk. Note that receiving payment requires that you consent to participate, complete the study attentively, and correctly enter the completion code on Amazon Mechanical code.

Who should I call with questions or problems?

For questions about the study, contact the researchers: Priyanka Verma <prverma@iu.edu> or Sameer Patil <patil@indiana.edu>.

For questions about your rights as a research participant or to discuss problems, complaints or concerns about a research

study, or to obtain information, or offer input, please contact the IU Human Subjects Office at 800-696-2949 or at irb@iu.edu.

Thank you for agreeing to participate in our research. Before you begin, please note that the data you provide may be collected and used by Amazon as per its privacy agreement. Following mTurk policies, we may reject your work if the HIT was not completed correctly or the instructions were not followed. You must be 18 or older to participate in this research.

We care about the quality of our data. In order for us to get the most accurate measures of your knowledge and opinions, it is important that you thoughtfully provide your best answers to each question in this study.

Will you provide your best answers to each question in this study?

- ☐ I will provide my best answers.
- ☐ I will not provide my best answers.
- ☐ I can not promise either way.

These page timer metrics will not be displayed to the recipient.

First Click: *0 seconds*

Last Click: *0 seconds*

Page Submit: *0 seconds*

Click Count: *0 clicks*

Browser Meta Info

This question will not be displayed to the recipient.

Browser: **Safari**

Version: **13.1.2**

Operating System: **Macintosh**

Screen Resolution: **1440x900**

Flash Version: **-1**

Java Support: **1**

User Agent: **Mozilla/5.0 (Macintosh; Intel Mac OS X 10_13_6)**

AppleWebKit/605.1.15 (KHTML, like Gecko) Version/13.1.2 Safari/605.1.15

Background

Note: Please answer the questions in this questionnaire as they pertain to your **primary smartphone** and your practices during **typical** (i.e., NON-COVID) times.

What is the Operating System (OS) of your phone?

☐ Android

☐ iOS (iPhone)

☐ Other: (Please specify:)

Does your device use any type of lock (e.g., PIN, password, pattern, fingerprint, faceID, etc.)?

☐ Yes

- ☐ No
- ☐ Don't know

Who other than you can unlock your device? (*Select all that apply.*)

- ☐ Parents
- ☐ Spouse
- ☐ Siblings
- ☐ Friends
- ☐ Children older than 13
- ☐ Other family members
- ☐ Colleagues
- ☐ Strangers
- ☐ No one

☐ Others. Please specify:

Notifications & Smartphone Features

How many notifications have you received in the last hour?

*NOTE: Include **all** types of notifications (i.e. app icon badges, notification center, lock screen, and banners).*

- ☐ 0
- ☐ 1 – 9
- ☐ 10 – 19
- ☐ 20 – 29

☐ 30 or more

On a typical day, how frequently do you pick up your phone to check, clear, or address notifications?

- ☐ Once in about 5 minutes
- ☐ Once in about 15 minutes
- ☐ Once in about 30 minutes
- ☐ Once in about 1 hour
- ☐ Once in about 3 hours
- ☐ Once in about 6 hours
- ☐ Once in about 12 hours
- ☐ Once in about 24 hours
- ☐ Whenever a notification is delivered
- ☐ Something else. (Please specify:)

Does your screen wake up when a notification is delivered?

- ☐ Never
- ☐ Sometimes
- ☐ About half the time
- ☐ Most of the time
- ☐ Always
- ☐ Do not know

For each of the following actions, mention how many hours in a typical day (from 0 to 24) you use it.

Use **Do Not Disturb (DND)** modeUse **Silent** modeTurn the device **off**Use **Airplane** mode

Use notification management apps

Please explain your reasons for the answers to the previous question. (Optional)

Device Sharing Behavior

How frequently can **someone else view the contents of notifications on your phone in any of the following places?**

	Never	Few times a month	Few times a week	Once a day	Few times a day
Home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meetings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Classes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Seminars and presentations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cafeterias and restaurants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Social gatherings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stores and markets	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public transport	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other. (Please specify:)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<div></div>					

How frequently do you **share your phone** with the following people?

	Never	Less than once a week	Few times a week	Multiple times a week	Once a day	Few times a day	Multiple times a day	N/A
Spouse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Siblings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Children older than 13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Colleagues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strangers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your reasons for the answers to the previous question. *(Optional)*

When you hand over your smartphone to someone else, which of the following actions do you take? *(Select all that apply.)*

- ☐ I don't allow anyone else to use my smartphone
- ☐ Nothing
- ☐ Close running applications
- ☐ Clear notifications
- ☐ Enable guest mode or second space
- ☐ Enable app locks
- ☐ Change accessibility settings
- ☐ Watch over the other person's use of the phone
- ☐ Check all the applications used by the person
- ☐ Other. (Please specify:)

Do you clear notifications from the screen before handing over your phone to the following people?

	Never	Rarely	Sometimes	Always	N/A
Spouse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Siblings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Children older than 13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Colleagues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Strangers



Last Notification

Think about the **latest notification** that you received on your smartphone. Please answer the following questions with respect to that notification.

Which app sent this notification?

How do you receive notifications from this app? (*Select all that apply.*)

- ☐ Lock Screen
- ☐ Notification drawer
- ☐ Floating notification
- ☐ App Badge
- ☐ Do not know
- ☐ Other. (Please specify:)

How do you receive notifications from this app? (*Select all*

that apply.)

- ☐ Lock Screen
- ☐ Notification center
- ☐ Banner (permanently)
- ☐ Banner (temporarily)
- ☐ App Badge
- ☐ Do not know
- ☐ Other. (Please specify:)

How quickly did you address the notification after you first saw it?

- ☐ within a minute
- ☐ within 5 minutes
- ☐ within 30 minutes
- ☐ within an hour
- ☐ within 6 hours
- ☐ within 12 hours
- ☐ within 24 hours
- ☐ Other: (Please specify:)

What action did you take when you first became aware that you had received this notification? *(Select all that*

apply.)

- ☐ Read the notification preview (title)
- ☐ Read the notification content
- ☐ Cleared it from the phone lock screen
- ☐ Cleared it from the notification center/ drawer
- ☐ Opened the relevant app to address the notification
- ☐ Did not do anything
- ☐ Prevented further notifications from the app (Please tell us how:)

- ☐ Other. (Please specify:)

How concerned would you be if **someone else viewed this notification?**

- ☐ Extremely concerned
- ☐ Somewhat concerned
- ☐ Neither concerned nor unconcerned
- ☐ Somewhat unconcerned
- ☐ Completely unconcerned

Please explain your reasons for the answers to the previous question. (Optional)

Did this notification include information pertaining to another person?

☐ Yes

☐ No

☐ Other. (Please specify:)

How concerned do you think the person would be if the content of the notification was seen by someone other than you?

☐ Extremely concerned

☐ Somewhat concerned

☐ Neither concerned nor unconcerned

☐ Somewhat unconcerned

☐ Not at all concerned

Negative Experiences

How many times have you experienced negative experiences related to notifications?

☐ 0

☐ 1-2

☐ 3-5

☐ 6-10

☐ 11-20

☐ More than 20

Of the negative experiences related to notifications that you have encountered, please tell us a bit about the **most negative experience.**

What caused the negative experience? (*Select all that apply.*)

- ☐ I had given my phone to someone else when the notification arrived.
- ☐ I left the phone screen unlocked.
- ☐ I forgot to take appropriate actions to silence the notification.
- ☐ I was screen casting / projecting the device display to others (e.g., in a presentation) when the notification popped up on screen.
- ☐ The notification included sensitive content. (Please specify:)

- ☐ Other. (Please specify:)

App Based Questions

Reminder: Please answer the questions in this questionnaire as they pertain to your **primary smartphone** and your practices during **typical** (i.e., NON-COVID) times.

!htbp

How concerned would you be if a family member reads the content of a notification from each of the app categories listed below?

	Extremely concerned	Somewhat concerned	Neither concerned nor unconcerned	Somewhat unconcerned	Completely unconcerned	N/A
Instant messaging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calendar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E-mail	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Banking and payments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health and fitness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your reasons for the answers to the previous question. (Optional)

How concerned would you be if a colleague reads the content of a notification from each of the listed app category?

	Extremely concerned	Somewhat concerned	Neither concerned nor unconcerned	Somewhat unconcerned	Completely unconcerned	N/A
Instant messaging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calendar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E-mail	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Banking and payments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health and fitness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please explain your reasons for the answers to the previous question. *(Optional)*

Mention the most frequently used Google product. To ensure that you are participating attentively, please select the 'Translate' option.

- ☐ Docs
- ☐ Hangouts
- ☐ Maps
- ☐ Photos
- ☐ Scholar
- ☐ Sheets
- ☐ Slides
- ☐ Translate
- ☐ Other. (Please mention:)

Have you enabled additional locking (e.g., PIN, password, etc.) for any of the following categories of apps? *(Select all that apply.)* NOTE: We are asking about locking that **you enabled on your own**, separate from the screen lock for the device or a mandatory lock/login forced by the app.

- ☐ Instant messaging
- ☐ Social media

- ☐ Calendar
- ☐ E-mail
- ☐ Banking and payments
- ☐ Health and fitness
- ☐ Dating
- ☐ Apps for work
- ☐ Travel and navigation
- ☐ None

Android Questions

What settings have you enabled for lock screen notifications?

- ☐ Show All
- ☐ Hide Sensitive
- ☐ Hide All
- ☐ I don't know

iOS Questions

What option have you enabled for notification previews?

- ☐ Always
- ☐ When unlocked
- ☐ Never
- ☐ I don't know

For the most frequently used app in each of the following categories, what option have you enabled for 'Show Previews'?

	Always	When unlocked	Never	Notification disabled	I don't know	N/A
Instant messaging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social media	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calendar app	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E-mail	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Banking or payment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Work based or professional purposes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Travel and navigation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Health and fitness app	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

MUIPC

Please indicate your level of agreement with the following statements:

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I believe that the location of my mobile device is monitored at least part of the time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I am concerned that mobile apps are collecting too much information about me.

☐☐☐☐☐☐☐☐

I am concerned that mobile apps may monitor my activities on my mobile device.

☐☐☐☐☐☐☐☐

I feel that, as a result of my using mobile apps, others know about me more than I am comfortable with.

☐☐☐☐☐☐☐☐

Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
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I should select somewhat agree for this question.

☐☐☐☐☐☐☐☐

I believe that, as a result of my using mobile apps, information about me that I consider private is now more readily available to others than I would want.

☐☐☐☐☐☐☐☐

I feel that, as a result of my using mobile apps, information about me is out there that, if used, will invade my privacy.

☐☐☐☐☐☐☐☐

Technical Efficacy

Please indicate your level of agreement with the following statements:

	Disagree	Rather disagree	Neither disagree, neither agree	Rather agree	Agree
In general, I often have difficulty when using my smartphone, apps, websites, or computer programs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, I am not able to solve questions or problems on my own when using my smartphone, apps, websites, or computer programs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, I need support when trying out something new on my smartphone or computer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Disagree	Rather disagree	Neither disagree, neither agree	Rather agree	Agree
In general, I find it hard to adjust settings of my smartphone, apps, websites, or computer programs (for example, privacy or safety settings).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, I often have questions or problems when using my smartphone, apps, websites or computer programs after an update has been done.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Demographics

Finally, please tell us a bit about yourself:

What is your year of birth?

What is your gender?

☐ Male

☐ Female

☐ Non-binary

☐ Prefer to self-describe:

☐ Prefer not to disclose

What is your ethnic background? *(Select all that apply.)*

☐ American Indian or Native American

☐ Asian

☐ Black or African American

☐ Native Hawaiian or Pacific Islander

☐ White

☐ Hispanic

☐ Other. (Please specify:)

☐ Prefer not to say

What is the highest level of education you have completed?

- ☐ Less than high school
- ☐ High school diploma
- ☐ Vocational training
- ☐ Some college
- ☐ College graduate (B.S., B.A., or other 4 year degree)
- ☐ Master's degree
- ☐ Doctoral degree
- ☐ Professional degree after college (e.g., law or medical school)
- ☐ Other. (Please specify:)
- ☐ Prefer not to say

What is your current employment status? *(Select all that apply.)*

- ☐ Employed full time
- ☐ Employed part time
- ☐ Unemployed looking for work
- ☐ Unemployed not looking for work
- ☐ Homemaker
- ☐ Student
- ☐ Retired
- ☐ Disabled
- ☐ Other. Please specify:
- ☐ Prefer not to say

What is your profession?

What is your field of study?

What is your current **annual** household income before taxes?

- ☐ Less than \$10,000
- ☐ \$10,000 to \$19,999
- ☐ \$20,000 to \$29,999
- ☐ \$30,000 to \$39,999
- ☐ \$40,000 to \$49,999
- ☐ \$50,000 to \$59,999
- ☐ \$60,000 to \$69,999
- ☐ \$70,000 to \$79,999
- ☐ \$80,000 to \$89,999
- ☐ \$90,000 to \$99,999
- ☐ More than \$100,000
- ☐ Prefer not to disclose

How many years have you lived in the United States of

America?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ More than 10 or All my life

Including yourself, how many people live in your household?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ More than 10

What is your current marital status?

- ☐ Married
- ☐ Widowed
- ☐ Divorced
- ☐ Separated
- ☐ Never Married
- ☐ Prefer not to disclose
- ☐ Other. (Please specify:)

Closing

Is there anything else you would like to tell us?

Powered by Qualtrics