

Survey Material

1. Participant Information Sheet

This study was certified according to [our institute], reference number [xxxx]. Please take time to read the following information carefully. You should keep this page for your records.

Who are the researchers? REDACTED

What is the purpose of the study? Our study aims to provide a comprehensive perspective on bystander definition from the viewpoint of the photographed individuals. Additionally, we seek to identify the influential factors that impact bystanders' comfort levels regarding appearing as bystanders in online sharing photos. This will help us develop context-aware detectors to manage facial photos shared on social media.

Why have I been asked to take part? You have been invited to take part in the study because you expressed an interest in this study. You are 18 years old or above and fluent in English.

Do I have to take part? No – participation in this study is entirely up to you. You can withdraw from the study at any time, up until 10 days after the completion of the survey, the point prior to the process of data analysis in the study without giving a reason. After this point, personal data will be deleted and anonymised data will be combined such that it is impossible to remove individual information from the analysis. Your rights will not be affected. If you wish to withdraw, contact REDACTED. We will keep copies of your original consent, and of your withdrawal request.

What will happen if I decide to take part? In the survey, you will encounter 16 scenarios, and for each one, you'll be prompted to answer questions from the perspective of the photographed person. These questions focus on defining "bystander" and capturing your feelings regarding the public sharing of the respective photo. You will also be asked to provide basic demographic information and questions about your privacy preference. The entire survey takes about 26-30 minutes to complete.

Compensation You will be paid £4.05 for your participation in this study.

Are there any risks associated with taking part? There are no significant risks associated with participation. The risks and discomfort associated with participation in this study are no greater than those ordinarily encountered in daily life or during the use of the online social network.

Are there any benefits associated with taking part? Your answers can help researchers learn more about how to manage facial photos in the context of online photo sharing.

What will happen to the results of this study? The results of this study may be summarised in published articles, reports and presentations. Quotes or key findings will be anonymized: We will remove any information that could, in our assessment, allow anyone to identify you. With your consent, information can also be used for future research. Your data may be archived for a maximum of four years. All potentially identifiable data will be deleted within this timeframe if it has not already been deleted as part of anonymization.

Data protection and confidentiality. Your data will be processed in accordance with Data Protection Law. All information collected about you will be kept strictly confidential. Your data will be referred to by a unique participant number rather than by name. All electronic data will be stored on a password-protected encrypted computer, on the [our institute]'s secure file servers, or on the [our institute]'s secure encrypted cloud storage services (DataShare, ownCloud, or Sharepoint) and all paper records will be stored in a locked filing cabinet in the PI's office. Your consent information will be kept separately from your responses in order to minimise risk.

What are my data protection rights? The University of Edinburgh is a Data Controller for the information you provide. You have the right to access information held about you. Your right of access can be exercised in accordance Data Protection Law. You also have other rights including rights of correction, erasure and objection. For more details, including the right to lodge a complaint with the REDACTED, please visit REDACTED. Questions, comments and requests about your personal data can also be sent to the REDACTED. For general information about how we use your data, go to: [our institute website].

Who can I contact? If you have any further questions about the study, please contact the lead researcher, REDACTED. If you wish to make a complaint about the study, please contact REDACTED, please provide the study title and detail the nature of your complaint.

Updated information. If the research project changes in any way, an updated Participant Information Sheet will be made available on [our institute website].

By proceeding with the study, I agree to all of the following statements:

- I have read and understood the above information.
- I understand that my participation is voluntary, and I can withdraw at any time.
- I consent to my anonymised data being used in academic publications and presentations.

- I allow my data to be used in future ethically approved research.
- I am over 18 years old and fluent in English.
- I agree ◦ I disagree and exit the survey

2. Demographics

1. What is your age? ◦ 18-24 ◦ 25-34 ◦ 35-44 ◦ 45-54 ◦ 55 or older
2. What is your gender? ◦ Male ◦ Female ◦ Non-binary / third gender ◦ Prefer not to say
3. Please specify your ethnicity. ◦ African American/Black ◦ Hispanic or Latino ◦ Asian ◦ Native American ◦ Middle Eastern ◦ White or Caucasian ◦ Multiple races ◦ Others ◦ Prefer not to answer
4. What is your highest level of education? ◦ Less than high school ◦ High school or equivalent ◦ Some college, no degree ◦ Associate's degree, occupational ◦ Associate's degree, academic ◦ Bachelor's Degree ◦ Master's Degree ◦ Professional Degree ◦ Doctoral Degree ◦ Prefer not to say
5. Do you currently have a job (or previously worked) in computer science, information technology, or some other technical field? Or, if you are a student, do you study one of these topics in your degree program? ◦ Yes ◦ No ◦ Prefer not to say

3. Instructions on Scenario-related Questions

In this section, you'll engage with **16** scenarios, each accompanied by an image and detailed description. Your task is to immerse yourself in each scenario, envision yourself as the individual portrayed in the designated photo, and then respond to related questions.

The scenario description will include information about:

1. The location of the photograph: public space (e.g., restaurant, street, etc.) or private space (e.g., office, company, school, hospital, home, conference, etc.)
2. The intended topic of the photo: featuring people, activities, objects, or others (e.g., daily vlog, street/scenic spot/park view, etc.)
3. The relationship between you and the photographer: stranger or acquaintance.
4. Your consent regarding being photographed:
 - 1) **Aware and actively participating:** You are willing to actively engage in the shooting activities when being photographed. For example, you may pose intentionally when you notice photographers around you, or you may follow specific instructions from the photographer regarding posing.
 - 2) **Aware:** You are aware of being photographed but not actively participating.
 - 3) **Unaware:** You are not aware of being photographed.

5. Whether the photographer mentioned you in the caption or accompanying text when uploading the photo to a social media platform (e.g., using @ on Twitter).

After understanding the context provided, you will be prompted to answer the following questions:

1. Your perception of yourself as a **bystander and reasons**. This involves considering both the content of the photo and the contextual description of its capture and upload.
2. Evaluation of **whether you are positioned in the background of the image**, solely utilizing visual cues within the image and a provided scale to articulate your judgment.
3. Your **feelings about the image being publicly shared** on social media platforms.
4. Evaluation of your level of **sensitivity** to the information presented or conveyed within the image, using a provided scale to express your judgment.
5. Your perception of the **sentiment** of the photo, referring to the emotions conveyed by the image and using a provided scale to express your judgment.

When responding to questions about position, sensitivity, and sentiment, you can refer to the accompanying tips provided after each question. We use the symbol "?" to indicate tips. You can hover over the symbol to view the tips, which will provide helpful guidance for your responses.

4. Scenario-related Questions

5 examples of scenarios are described below.

4.1. Scenario 1 out of 16

You (Person E) were at a **restaurant**, enjoying your meal. Nearby, a **stranger** dining in the restaurant used their smartphone to take photos of their friends (Person A, B, C, and D) (as depicted in the figure 1 below). You were **unaware** of the photo being taken. The photo producer uploaded this photo on his social media account and didn't mention you.

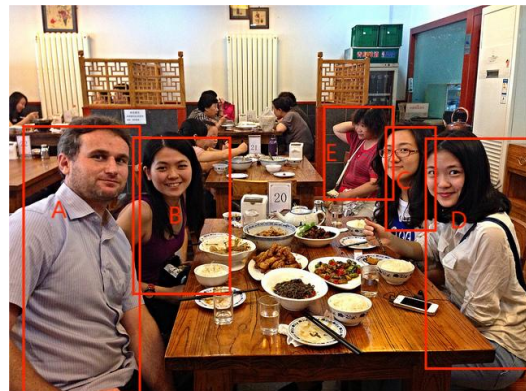


Figure 1: Scenario 1

1. To what extent do you perceive yourself as a bystander in the photo? ◦ Definitely not a bystander ◦ Probably not a bystander ◦ Unsure ◦ Probably a bystander ◦ Definitely a bystander

2. To what extent do you agree or disagree with the statement? I am in the background of this image. ☐ Strongly disagree ☐ Disagree ☐ Neither agree nor disagree ☐ Agree ☐ Strongly agree

(**Tips:** Examine visual cues within the image to determine if you, as the person being photographed, are situated in the background. Consider factors such as relative size, position in the frame, and clarity.)

3.1 (if Definitely not a bystander or Probably not a bystander) What is(are) the main reason(s) for thinking that you were the bystander? (Consider the multiple-choice options provided below and choose the answer(s) that aligns with your response and/or provide additional descriptions in option "Other".) ☐ This photo is not focused on me. ☐ There is no specific subject in this photo. ☐ I am in the background of this photo. ☐ My appearance is different than other people in this photo. ☐ My activity is different than other people in this photo. ☐ I am blocked by other people/objects. ☐ The uploader didn't mention me. ☐ I did not actively participate in photography. ☐ My relationship with the uploader leads me to perceive myself as a bystander in the photo. ☐ Other (Please describe) [free text]

3.2 (if Definitely a bystander or Probably a bystander) What is(are) the main reason(s) for thinking that you were not the bystander? (Consider the multiple-choice options provided below and choose the answer(s) that aligns with your response and/or provide additional descriptions in option "Other".) ☐ This photo is focused on me. ☐ This photo is about what I was doing. ☐ I am the only person in the photo. ☐ I am taking a large space in the photo. ☐ I was doing the same activity as other people in this photo. ☐ The appearance of me is similar to other people of this photo. ☐ I actively participated in photography. ☐ The uploader mentioned me. ☐ I am in the foreground of this photo. ☐ My relationship with the uploader leads me to perceive myself not as a bystander in the photo. ☐ Other (Please describe) [free text]

3.3 (if Unsure) Why do you think it is hard to decide whether you were a bystander in this photo? (Consider the multiple-choice options provided below and choose the answer(s) that aligns with your response and/or provide additional descriptions in option "Other".) ☐ Despite not being the intended focus, I was important to this photo. ☐ Despite not being the intended focus, I actively participated in the shooting and intentionally became a part of the photo. ☐ Despite not being the intended focus, I was mentioned when the photographer uploaded the photo. ☐ Despite being the intended focus, I didn't actively participate in the shooting. ☐ Despite being the intended focus, I was not mentioned when the photographer uploaded the photo. ☐ My relationship with the photographer makes it difficult to determine whether I was a bystander. ☐ My position in the photo makes it difficult to determine whether I was a bystander. ☐ The photographer aimed to capture the entire scene, and I just happened to be in the scene. ☐ Other (Please describe) [free text]

4. How would you feel about this image being publicly shared by the photographer on their social media platforms? ☐ Extremely uncomfortable ☐ Uncomfortable ☐ Neither

comfortable nor uncomfortable ☐ Comfortable ☐ Extremely comfortable

5. Please score your perception of sensitivity to this image. ☐ Not sensitive at all ☐ Slightly sensitive ☐ Moderately sensitive ☐ Very sensitive ☐ Extremely sensitive

(**Tips:** Scoring the image sensitivity involves evaluating your level of sensitivity to the information presented or conveyed within the image. For instance, if the image contains details about drinking habits and you perceive this information as sensitive, then the image is considered sensitive. On the other hand, if you believe the image contains no sensitive information, then it is regarded as not sensitive at all. When rating sensitivity, consider the extent to which the information or content depicted in the image is sensitive.)

6. Please score your perception of sentiment to this image. ☐ Extremely negative ☐ Negative ☐ Neither positive nor negative ☐ Positive ☐ Extremely positive

(**Tips:** Sentiment refers to the emotions conveyed by the image. When rating sentiment, consider the emotions or feelings that the image may inspire in you, such as joy, sadness, excitement, calmness, or any other emotional response.)

4.2. Scenario 2 out of 16

You (Person A) were sitting **outdoors**. **One of your friends** nearby took photos of the **dog** (as depicted in the figure 2 below). You were captured in some of the photos. You were **aware** of this photo being taken and **actively participated in** it. The photo producer uploaded this photo on their social media account and **didn't mention** you.



Figure 2: Scenario 2

4.3. Scenario 3 out of 16

You (Person A) were hosting your wedding in a **private banquet room**. **One of your families** captured a photo featuring you (as depicted in the figure 3 below) using their phone. You were **aware** of this photo being taken and **actively participated in** it. The photo producer uploaded this photo on their social media account and **mentioned** you.

4.4. Scenario 4 out of 16

You (Person C) were managing equipment at the **conference site**. **One of your colleagues** used their smartphone



Figure 3: Scenario 3

to take photos (as depicted in the figure 4 below) of this conference. You were captured in some of these photos and were **unaware** of the photo being taken. The photo producer uploaded this photo on their social media account and **mentioned** you in the accompanying caption.



Figure 4: Scenario 4

4.5. Scenario 5 out of 16

You (Person A) were walking down the **street**. A **stranger** used their smartphone to take photos (as depicted in the figure 5 below) of the **street view**. You were captured in some of the photos. You were **aware** of the photo being taken. The photo producer uploaded this photo on their social media account and **didn't mention** you in the accompanying caption.

5. Privacy scale

1. To what extent do you agree or disagree with the following statements? ☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree

- I am concerned about online identity theft.
- I am concerned about my privacy online.
- I am concerned about my privacy in everyday life.
- I am likely to read the privacy policy of an e-commerce site before buying anything.



Figure 5: Scenario 5

- Privacy policies accurately reflect what companies do.

2. To what extent do you agree or disagree with the following statements? ☐ Strongly disagree ☐ Disagree ☐ Somewhat disagree ☐ Neutral ☐ Somewhat agree ☐ Agree ☐ Strongly agree

- It usually bothers me when online companies ask me for personal information.
- When online companies ask me for personal information, I sometimes think twice before providing it.
- It bothers me to give personal information to so many online companies.
- I'm concerned that online companies are collecting too much personal information about me.

3. Are you a private person who keeps to yourself or an open person who enjoys sharing with others? ☐ Very private ☐ Private ☐ Somewhat private ☐ Neutral ☐ Somewhat open ☐ Open ☐ Very open

6. Open-ended Question

1. Under what circumstances do you, as the person being photographed, consider yourself to be a bystander? [free text]

2. What would make you comfortable or uncomfortable with photos of yourself being posted publicly on social media by photographers? [free text]

3. How does being a bystander in a photo influence your comfort or discomfort level when it's uploaded to social media? [free text]

7. Attention-check question

Please select Very/Moderately sensitive for this item.
☐ Not sensitive at all ☐ Slightly sensitive ☐ Moderately sensitive ☐ Very sensitive ☐ Extremely sensitive