

Consent

CONSENT FORM

Study Title: Understanding How People Interpret Data Visualizations
Pertaining to a Particular Topic (IRB-FY2024-8652)

Principal Investigator:

[Redacted for review]

Faculty Advisor:

[Redacted for review]

Purpose: You are being asked to take part in a research study. The purpose of this research study is to understand how people interpret data visualizations pertaining to a particular topic. Due to the nature of the study, the full purpose of this research cannot be disclosed before you participate. You will be informed about the full purpose after you complete the study.

Procedure: If you agree to participate, you will be asked to complete a preliminary questionnaire, view a visualization, and complete follow-up questions. You are required to complete the study using a desktop device only. The total time is expected to be no more than 15 minutes.

Payment: You will receive \$2 as compensation for participating in this research study. Please be advised that if you fail to answer the attention-check question correctly, your submission will not be included for research analysis. So please read each question slowly and carefully.

Confidentiality and Data Sharing: Your participation in this study will remain confidential. We may make the survey responses that have no identifiable information publicly available for purposes of research transparency. It will not be possible to link the shared information back to you.

Risks and Benefits: All information you provide is considered completely confidential. While there is a foreseeable risk of breach of confidentiality, any identifying information collected will be kept in a secure location and only the researchers will have access to the data. We will remove all information that identifies you and use this de-identified data in other research. Research participants will not be identified in any publication or presentation of research results.

While you may not benefit directly from the study, we will use the study results to provide suggestions for improving the visualizations pertaining to this topic in the media.

Voluntary: Participation in this study is voluntary and you may refuse to participate before the study begins, or discontinue participation at any time without any penalty to you.

Study contacts: If you have any questions about this research project, please contact: [Redacted for review]

Consent Statement: I have read this consent form and understand the

information that has been provided above. I understand the research and my rights as a participant. I voluntarily agree to participate in this study. I certify that I am at least 18 years of age.

By selecting "I consent", you are consenting to the conditions described above.

- ☐ I consent
- ☐ I do not consent

Prolific ID

What is your Prolific ID?

Please note that this response should auto-fill with the correct ID

In-group Identification Questionnaire

Indicate whether you agree or disagree with the following statements.

I feel a bond with people of my racial group.

- ☐ Strongly disagree
- ☐ Somewhat disagree
- ☐ Neither agree nor disagree
- ☐ Somewhat agree
- ☐ Strongly agree

Being part of my racial group gives me a good feeling.

- ☐ Strongly disagree
- ☐ Somewhat disagree
- ☐ Neither agree nor disagree
- ☐ Somewhat agree
- ☐ Strongly agree

The fact that I am part of my racial group is an important part of my identity.

- ☐ Strongly disagree
- ☐ Somewhat disagree
- ☐ Neither agree nor disagree
- ☐ Somewhat agree
- ☐ Strongly agree

In-group Favoritism Questionnaire

Indicate whether you agree or disagree with the following statements.

I tend to trust people from my racial group more than people from other racial groups.

- ☐ Strongly disagree
- ☐ Somewhat disagree
- ☐ Neither agree nor disagree
- ☐ Somewhat agree
- ☐ Strongly agree

I feel more comfortable sharing personal information with someone from my racial group.

- ☐ Strongly disagree
- ☐ Somewhat disagree

- ☐ Neither agree nor disagree
- ☐ Somewhat agree
- ☐ Strongly agree

I believe people from my racial group generally have more positive qualities than people from other racial groups.

- ☐ Strongly disagree
- ☐ Somewhat disagree
- ☐ Neither agree nor disagree
- ☐ Somewhat agree
- ☐ Strongly agree

Demographic Questionnaire

What is your gender?

- ☐ Male
- ☐ Female
- ☐ Non-binary / third gender
- ☐ Prefer not to say

What is your year of birth?

What is your ethnicity?

- ☐ White
- ☐ Black or African American
- ☐ Latino/Hispanic
- ☐ American Indian or Alaska Native

- ☐ Asian
- ☐ Native Hawaiian or Pacific Islander
- ☐ Middle Eastern or North African
- ☐ Other

What is the highest degree or level of school you have completed? If currently enrolled, select the highest degree received.

- ☐ Less than a high school diploma
- ☐ High school degree or equivalent (e.g., GED)
- ☐ Some college, no degree
- ☐ Associate degree (e.g., AA, AS)
- ☐ Bachelor's degree (e.g., BA, BS)
- ☐ Master's degree (e.g., MA, MS, MEd)
- ☐ Professional degree (e.g., MD, DDS, DVM)
- ☐ Doctorate (PhD, EdD)

Distractor Task

Below are a few sequences of numbers. For each sequence, identify the next number that completes the pattern. Take your time and select the answer you think fits best.

What is the next number in the sequence: 2, 4, 6, 8, ____?

- ☐ 10
- ☐ 11
- ☐ 12
- ☐ 14

What is the next number in the sequence: 5, 10, 15, 20, ____?

- ☐ 25
- ☐ 30
- ☐ 35
- ☐ 40

What is the next number in the sequence: 100, 90, 80, 70, ____?

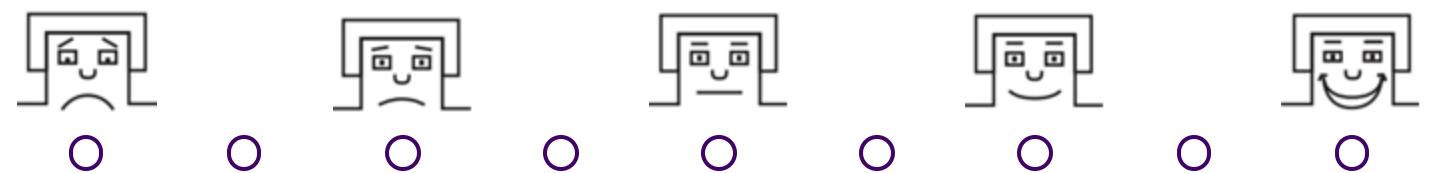
- ☐ 50
- ☐ 60
- ☐ 65
- ☐ 75

What is the next number in the sequence: 2, 4, 8, 16, ____?

- ☐ 20
- ☐ 24
- ☐ 32
- ☐ 64

Pre-study Emotion

Select the figure (or between figures) that most closely corresponds to how you feel.





Visualization Condition 3

Please take a look at the following information and answer a couple of questions about it in the next page. You will be able to go to the next page after 30 seconds.

Victims of Mass Public Shootings in the United States

Legend: Each person in the chart represents a single victim

 
Hispanic victim Victim of other or unknown racial background

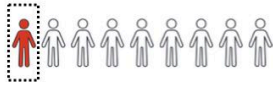
The dotted boundary for each year shows the expected number of Hispanic victims if Hispanic victims were proportional to the percentage of Hispanic people in the US population

Note: Data are from a real source. The source defines a mass shooting as an incident where four or more people, not including the shooter(s), were killed in a public place and not connected to another crime. Hispanic population percentage in the US for each year was obtained from census.gov.

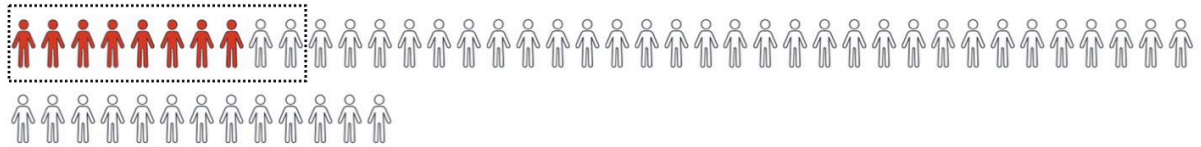




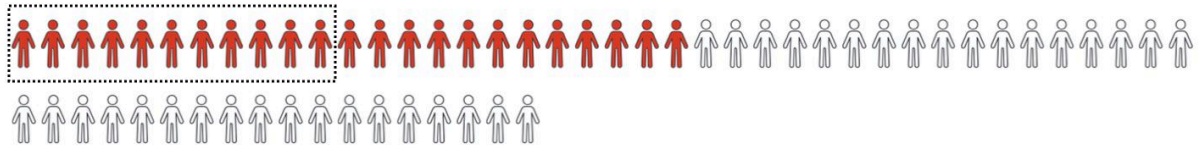
2020



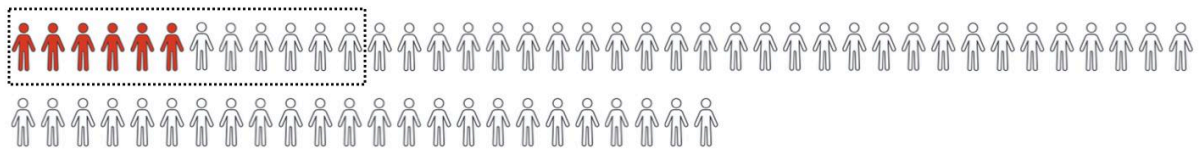
2021



2022



2023



Victims of Mass Public Shootings in the United States

Legend: Each person in the chart represents a single victim



Victim of other or unknown racial background

The dotted enclosure for each year shows the expected number of Hispanic victims if Hispanic victims were proportional to the percentage of Hispanic people in the US population

Note: Data are from a real source. The source defines a mass shooting as an incident where four or more people, not including the shooter(s), were killed in a public place and not connected to another crime. Hispanic population percentage in the US for each year was obtained from census.gov.





How many Hispanic victims were there in 2023?

- ☐ 10
- ☐ 6
- ☐ 12
- ☐ 64

Is the actual number of Hispanic victims greater than or less than the expected number of Hispanic victims for 2016?

- ☐ Greater than
- ☐ Less than

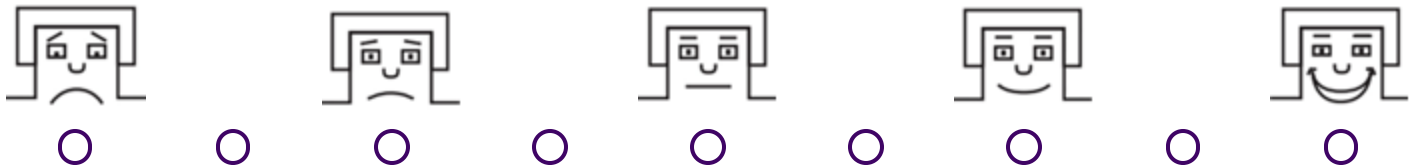
Verification Question

What was the topic of the chart you have seen?

- ☐ Shooters of mass public shootings in the United States
- ☐ Victims of mass public shootings in the United States
- ☐ Locations of active-shooter attacks in the United States
- ☐ Mass shootings that have taken place in schools

Post-study Emotion and Questionnaire

Select the figure (or between figures) that most closely corresponds to how you feel.



Please describe what you learned from the information provided (in as much detail as possible).

On the following scale, on which the political views that people might hold are arranged from extremely liberal to extremely conservative, where would you place yourself?

- ☐ Do not know / Cannot choose
- ☐ Extremely liberal
- ☐ Liberal
- ☐ Slightly liberal

- ☐ Moderate, middle of the road
- ☐ Slightly conservative
- ☐ Conservative
- ☐ Extremely conservative

How often do you access news? By news we mean national, international, regional/local news and other topical events accessed via radio, TV, newspaper, or online.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ A moderate amount
- ☐ A great deal

List the sources where you typically get your news from.

How would you rate your familiarity with general interactive visualizations and visual tools found on the web, media etc.?

- ☐ Not at all familiar
- ☐ Slightly familiar
- ☐ Somewhat familiar
- ☐ Moderately familiar
- ☐ Extremely familiar

Debriefing

Thank you for your participation in this research study. For this study, it was important that information was withheld from you. Now that your participation is complete, you will be given more information about this.

What you should know about this study

Our research aims to investigate how people perceive and react to visualizations of mass shootings, particularly focusing on the racial backgrounds of victims. We're interested in understanding whether people's feelings about mass shootings are influenced by seeing visualizations of victims who match or mismatch their own racial background.

In our study, you were either randomly assigned or assigned based on your stated race/ethnicity to view visualizations depicting victims involved in mass shootings that occurred in the United States between 2013 and 2023. These visualizations may have shown only the total number of victims, or they may have also highlighted the number of victims from specific racial groups (White, Black, Hispanic).

The reason we didn't provide all the details initially is because we wanted to ensure that your responses were as genuine and unbiased as possible. We hope this explanation helps you understand the reasoning behind the initial lack of disclosure and assures you that your participation is essential in helping us gain valuable insights into this important topic. If you have any further questions or concerns,

please feel free to reach out to us. Your participation is greatly appreciated.

Right to withdraw data

Because you were not fully informed about the study during the consent process, you may choose to have your data not used for the research analysis. Please indicate below if you give permission to have your data included in the research analysis.

If you have questions

If you have any questions about this research project, please contact:

[Redacted for review]

Thank you for your time and cooperation.

Please click the button below to be redirected back to Prolific and register your submission.

- ☐ I give permission for my data to be included in the study.
- ☐ I DO NOT give permission for my data to be included in the research analysis.